



SDGs

KEYPHRASE MAPPING
CHIANG MAI UNIVERSITY

USER GUIDE

คู่มือผู้ใช้งาน

BASED ON ELSEVIER 2025 SDGS MAPPING

Table of Contents

1. Getting Started	1
2. Data Entry	3
3. Processing and Interpreting Results	4
4. Example Guidelines for Improving Article Alignment with SDGs	10
5. System Limitations	11
6. Elsevier's Academic Work Mapping to SDGs and the CMU SDGs Keyphrase Mapping System	11
7. Dashboard 2025 SDG Trending Keywords	12
8. Wordcloud	17
9. References	67

List of Figures

Figure 1 First page	1
Figure 2 Log in using CMU Email Account	2
Figure 3 Successful Login	2
Figure 4 An example of data entry	3
Figure 5 Example of result	5
Figure 6 Example of the Summary Results	5
Figure 7 AUTHKEY Comparison Example	6
Figure 8 TITLE-ABS Comparison Example	7
Figure 9 Example of Results Before Editing	10
Figure 10 Example of Results Before Editing (SDG 8)	10
Figure 11 Example of Results After Editing (SDG 8)	11
Figure 12 Dashboard: Frequently used keywords	12
Figure 13 Control Panel	12
Figure 14 Frequently Used Keywords Table	13
Figure 15 Selecting Multi-SDG or Single-SDG	13
Figure 16 Word Cloud	14
Figure 17 Example of Word Cloud Usage	15
Figure 18 Dashboard: List of keyword	15
Figure 19 Control Panel	15
Figure 20 Keyword List Table	16
Figure 21 Search for Keyword	16
Figure 22 Selecting both Multi-SDG and Single-SDG	16
Figure 23 Selecting Multi-SDG Only	17
Figure 24 Keyword Label	17
Figure 25 Count of keywords by SDG	17
Figure 26 Wordcloud SDG1	18
Figure 27 Wordcloud SDG2	21
Figure 28 Wordcloud SDG3	24
Figure 29 Wordcloud SDG4	27
Figure 30 Wordcloud SDG5	30
Figure 31 Wordcloud SDG6	33
Figure 32 Wordcloud SDG7	36
Figure 33 Wordcloud SDG8	40
Figure 34 Wordcloud SDG9	43
Figure 35 Wordcloud SDG10	46
Figure 36 Wordcloud SDG11	49
Figure 37 Wordcloud SDG12	52
Figure 38 Wordcloud SDG13	55
Figure 39 Wordcloud SDG14	58
Figure 40 Wordcloud SDG15	61
Figure 41 Wordcloud SDG16	64
Figure 42 Wordcloud SDG17	67

List of Tables

Table 1 Matching Results	6
Table 2 Scopus Search Language	6
Table 3 Scopus Search Language – Elsevier 2025 SDG Mapping and AUTHKEY Comparison Example	7
Table 4 Scopus Search Language – Elsevier 2025 SDG Mapping and TITLE-ABS Comparison Example	7
Table 5 Boolean Operators in Scopus Search Language	8
Table 6 Query Consideration Examples	8
Table 7 Description of the Frequently Used Keywords Table	13
Table 8 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-1)	18
Table 9 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-2)	21
Table 10 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-3)	24
Table 11 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-4)	27
Table 12 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-5)	30
Table 13 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-6)	34
Table 14 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-7)	37
Table 15 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-8)	40
Table 16 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-9)	43
Table 17 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-10)	46
Table 18 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-11)	49
Table 19 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-12)	52
Table 20 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-13)	55
Table 21 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-14)	58
Table 22 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-15)	61
Table 23 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-16)	64
Table 24 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-17)	67

1. Getting Started

Users can begin using the web application via any standard web browser, such as Google Chrome, Microsoft Edge, Apple Safari, or Opera. The basic steps and instructions for initial access are as follows:

- 1.1. Navigate to the URL <https://sdgskeywords.ora.oou.cmu.ac.th> The application's first page will then appear as shown below:

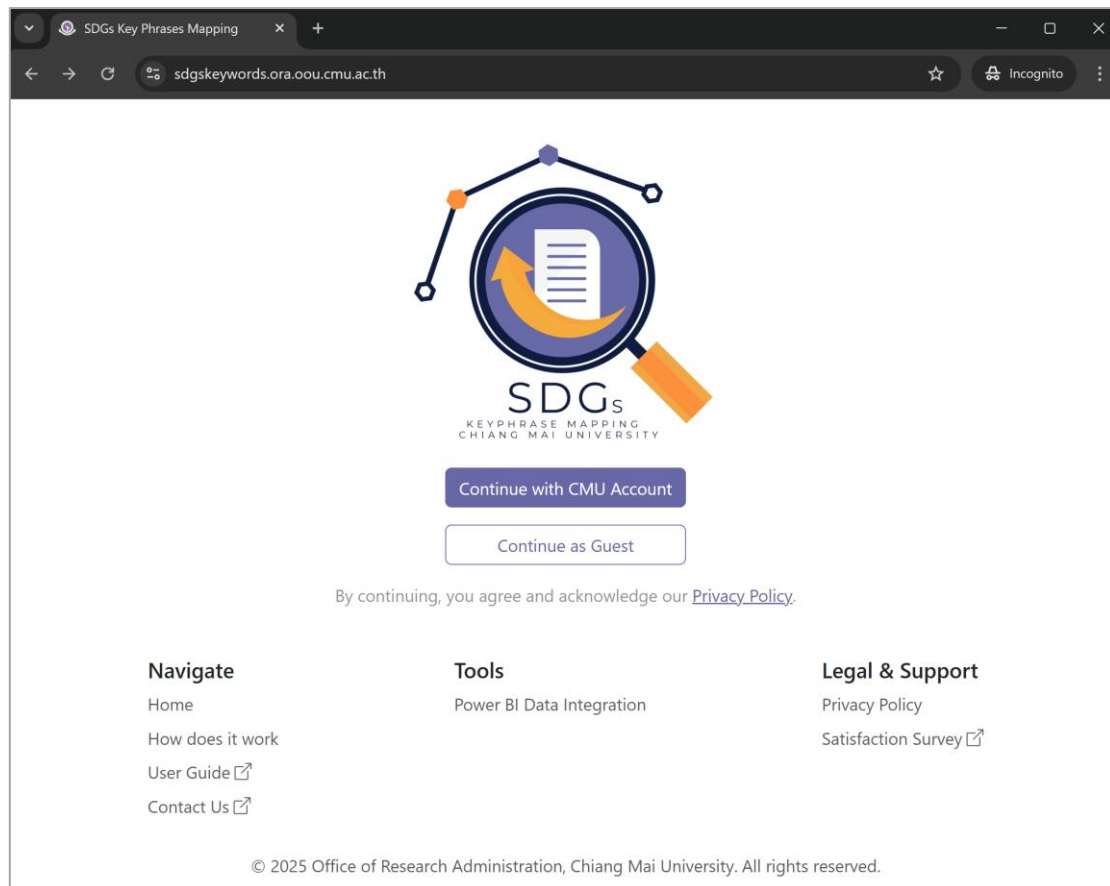


Figure 1 First page

1.2. Select "Continue with CMU Account" and use your CMU Email Account to log in to the system.

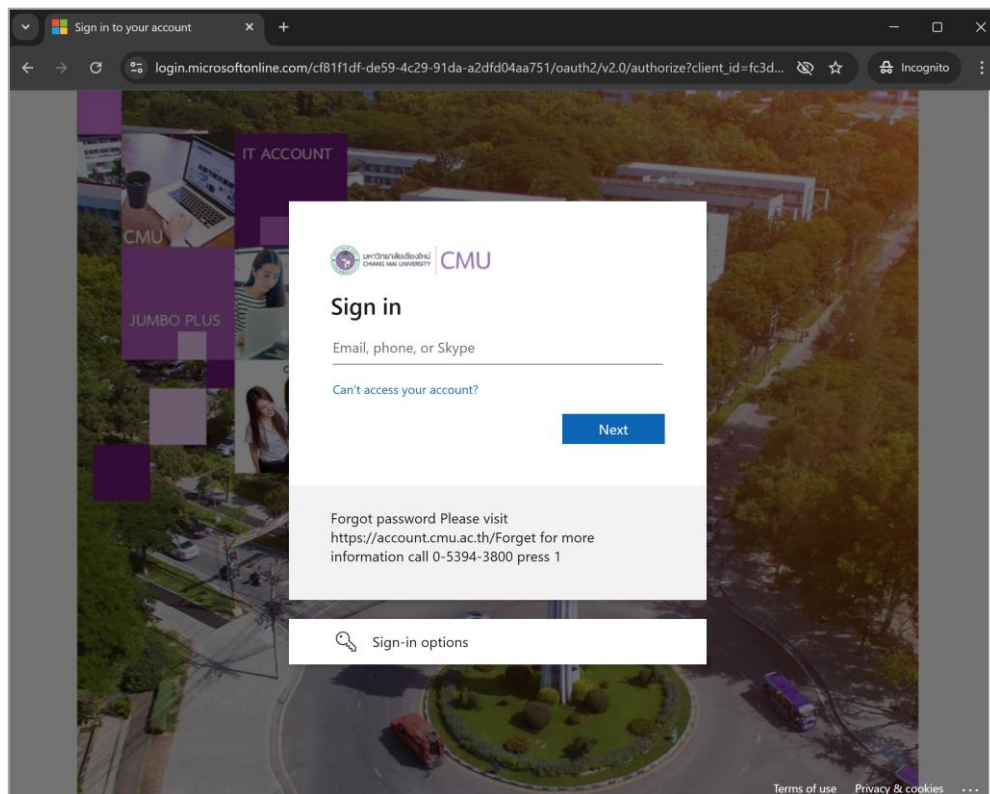


Figure 2 Log in using CMU Email Account

1.3. The Main Window After Successful Login

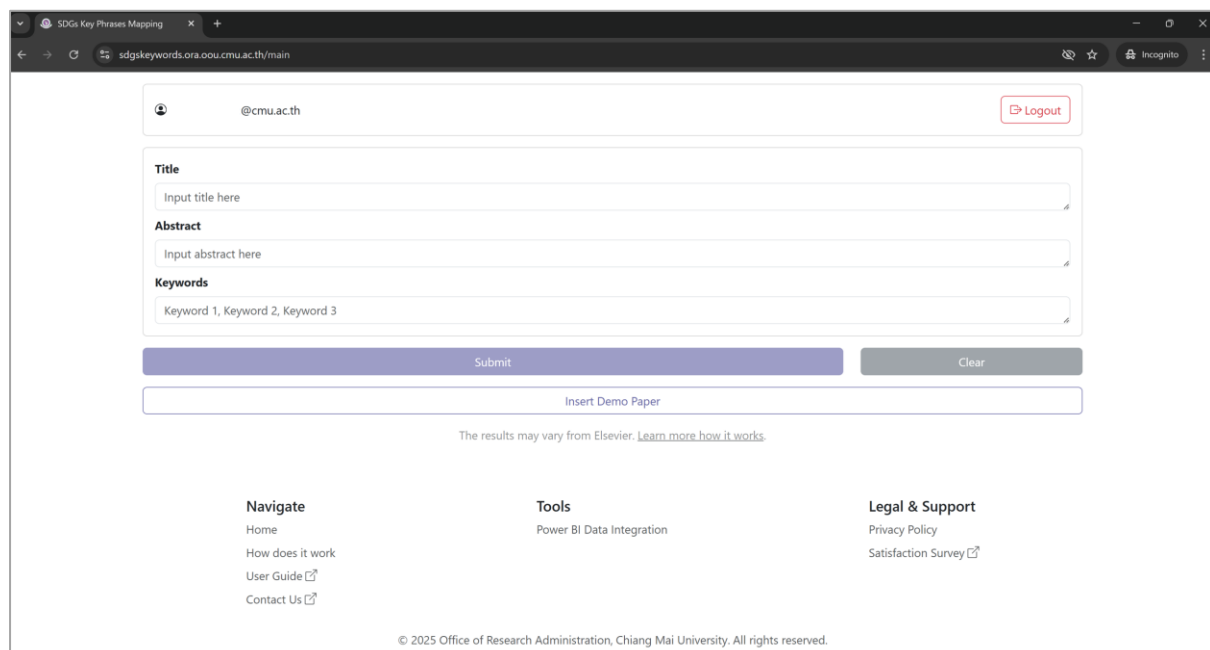


Figure 3 Successful Login

1.4. Users can scroll down to view the following menus:

- Home: Returns to the application's main page.
- How does it work: Description of the application's underlying processing system and logic.
- User Guide: The usage manual, also accessible at <https://ora.oou.cmu.ac.th/sdgskeywordmapping/>
- Contact Us: Contact the Office of Research Administration (ORA) (via Messenger App)
- Power BI Data Integration: Instructions for using the API to integrate and access data on Microsoft Power BI (restricted to authorized users only).
- Privacy Policy: The application's privacy guidelines.
- Satisfaction Survey: A form to provide satisfaction ratings and feedback on usage (only available in Thai).

2. Data Entry

2.1. Users are required to input the information of the academic work they want to match with key phrases. **Please note that all input data must be in English only.**

- Title
- Abstract
- Keywords: Keywords are separated by comma (,)

The screenshot shows a web application interface for data entry. At the top, there is a header bar with a user profile icon and the text '@cmu.ac.th' on the left, and a 'Logout' button on the right. Below the header, the form is divided into three main sections: 'Title', 'Abstract', and 'Keywords'. The 'Title' section has a text input field containing 'Challenging times: ethics, nursing and the COVID-19 pandemic'. The 'Abstract' section has a larger text area containing a paragraph about nurses' challenges during the COVID-19 pandemic. The 'Keywords' section has a text input field containing 'COVID-19, Ethics, Global health emergency, Moral courage, Moral distress, Nursing ethics, Pandemics, SARS-CoV-2'. Below these sections are two buttons: 'Submit' (in a blue box) and 'Clear' (in a grey box). Under the buttons, a small note states 'The results may vary from Elsevier. [Learn more how it works.](#)'. At the bottom of the form, there is a footer section with three columns of links: 'Navigate' (Home, How does it work, User Guide, Contact Us), 'Tools' (Power BI Data Integration), and 'Legal & Support' (Privacy Policy, Satisfaction Survey). The footer also includes a copyright notice: '© 2025 Office of Research Administration, Chiang Mai University. All rights reserved.'

Figure 4 An example of data entry

2.2. Users have the option not to enter text for every topic (Title, Abstract, Keywords). However, for a thorough and efficient mapping, it is advisable to enter text for every topic. When finished, select “Submit” to begin the key phrase matching process.

2.3. In case users need to delete the entire text, users can select “Clear”.

3. Processing and Interpreting Results

The matching process encompasses the following steps: Upon retrieving of inputs containing the title, abstract, and keywords, the system will process inputs with search queries from the Elsevier 2025 Sustainable Development Goals (SDGs) Mapping across all categories.

- SDG 1: NO POVERTY
- SDG 2: ZERO HUNGER
- SDG 3: GOOD HEALTH AND WELL-BEING
- SDG 4: QUALITY EDUCATION
- SDG 5: GENDER EQUALITY
- SDG 6: CLEAN WATER AND SANITATION
- SDG 7: AFFORDABLE AND CLEAN ENERGY
- SDG 8: DECENT WORK AND ECONOMIC GROWTH
- SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE
- SDG 10: REDUCED INEQUALITIES
- SDG 11: SUSTAINABLE CITIES AND COMMUNITIES
- SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION
- SDG 13: CLIMATE ACTION
- SDG 14: LIFE BELOW WATER
- SDG 15: LIFE ON LAND
- SDG 16: PEACE, JUSTICE AND STRONG INSTITUTIONS
- SDG 17: PARTNERSHIPS FOR THE GOALS

3.1. Basic Interpretation

After the application finishes analyzing your input text (Title, Abstract, and Keywords), the mapping results will be displayed on the right-hand panel of the screen.

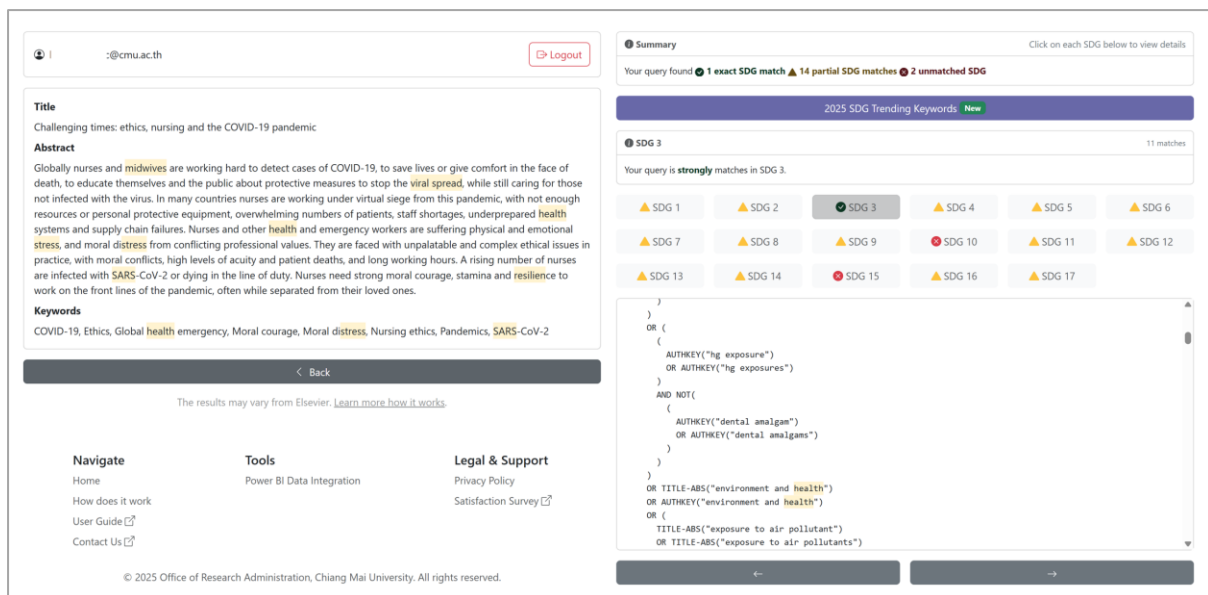


Figure 5 Example of result

The results are divided into three main sections:

Section 1: Summary



Figure 6 Example of the Summary Results

- **Exact SDG matches:** Indicates the number of SDGs where the text shows "high" or "explicit" alignment, based on the Elsevier 2025 search query.
- **Partial SDG matches:** Indicates the number of SDGs where the text shows "partial" alignment.
- **Unmatched SDG:** Indicates the number of SDGs that are "not aligned" with the input text.

Section 2: The 17 SDGs Results

The results for all 17 goals are displayed using symbols and colors to indicate the status. The system uses the Scopus Search Language to perform the mapping, which is displayed in three formats:

Table 1 Matching Results

Format	Example	Meaning
exact SDG match	✓ SDG 3	The content shows clear alignment with that specific SDG.
partial SDG matches	▲ SDG 9	Parts of the content qualify and are closely related to that specific SDG.
unmatched SDG	✗ SDG 15	The content does not align with that specific SDG.

Section 3: Matching Details

The system displays the underlying Scopus Search Language used for the matching process. The interpretation of each Scopus Field Code is as follows:

Table 2 Scopus Search Language

Search Language	Meaning
AUTHKEY	Checks if the search term is present in the Author keywords field of the text.
TITLE	Checks if the search term is present in the Title field of the text.
TITLE-ABS	Checks if the search term is present in the Title <u>or</u> Abstract field of the text.
TITLE-ABS-KEY	Checks if the search term is present in the Title, <u>or</u> Abstract, <u>or</u> Author keywords field of the text.

1) AUTHKEY

The screenshot displays a document snippet on the left and a corresponding Scopus search language query on the right. The document snippet includes a title, abstract, and keywords. The keywords section contains the text: "COVID-19, Ethics, Global health emergency, Moral courage, Moral distress, Nursing ethics, Pandemic, SARS-CoV-2". The search language query is shown in a text area on the right, featuring a complex Boolean expression that includes the term "AUTHKEY("SARS")". A red arrow points from the "SARS-CoV-2" keyword in the document's keywords section to the "AUTHKEY("SARS")" term in the search language query, illustrating the mapping process.

Figure 7 AUTHKEY Comparison Example

Table 3 Scopus Search Language – Elsevier 2025 SDG Mapping and AUTHKEY Comparison Example

Search Language	Meaning	Example usage
AUTHKEY	Checks if the search term is present in the Author keywords field of the text.	AUTHKEY("SARS") = True

2) TITLE-ABS

Figure 8 TITLE-ABS Comparison Example

Table 4 Scopus Search Language – Elsevier 2025 SDG Mapping and TITLE-ABS Comparison Example

Search Language	Meaning	Example usage
TITLE-ABS	Checks if the search term is present in the Title <u>or</u> Abstract field of the text.	TITLE-ABS("sustainable aquaculture") = True

3.2. Processing Principles

1) The Scopus Search Language uses Boolean operators, and when multiple operators are present in a query, they are processed in the following order:

- A. OR
- B. AND
- C. AND NOT

Search processing is executed from left to right.

Table 5 Boolean Operators in Scopus Search Language

Boolean	Meaning	Example
OR	Checks for and retrieves documents containing at least one of the specified search terms.	AUTHKEY("lakes") OR AUTHKEY("lake") This means the text meets the criteria if at least one of the terms "lakes" or "lake" appears in the processed Author Keywords section.
AND	Checks for and retrieves documents containing all of the specified search terms.	TITLE-ABS("foreign aid") AND TITLE-ABS("poverty") This means the text meets the criteria if the term "foreign aid" appears in the Title or Abstract AND the term "poverty" appears in the Title or Abstract.
AND NOT	Checks for and retrieves documents excluding the specified search terms.	(AUTHKEY("urban park") AND NOT (AUTHKEY("veterinary")) This means the text meets the criteria if the term "urban park" is present AND the term " veterinary " is NOT present in the Author Keywords.

2) Wildcard

The Wildcard feature is used to search for terms in a "loose phrase" format (various spellings). For the Elsevier 2025 SDG Mapping, the * (Asterisk) is used to represent any number of characters.

Example: TITLE("financ*") OR TITLE("bank*"). This means the text meets the criteria if the Title contains a word starting with financ or bank. The term financ* may refer to forms such as: finance, finances, financial, or financing. Therefore, titles such as "Financial bank" or "Online banking" will be successfully matched.

3) Query Consideration Examples

Table 6 Query Consideration Examples

Query	Meaning	Text	Result
TITLE-ABS ("river") AND TITLE-ABS ("protect") AND TITLE-ABS	The text must contain all three terms: "river", "protect", and "restore" in the TITLE or Abstract.	River Restoration Strategies: A Comprehensive Approach to Protect Ecosystem Health	False The term "restore" is missing from the text.

Query	Meaning	Text	Result
("restore")			
TITLE-ABS ("river") AND TITLE-ABS ("protect") AND TITLE-ABS ("restore")	The text must contain all three terms: "river", "protect", and "restore" in the TITLE or Abstract.	River Restoration Strategies: A Comprehensive Approach to Protect and Restore Ecosystem Health	True
(AUTHKEY("protect*") OR AUTHKEY("conservation*")) AND (AUTHKEY("water") OR AUTHKEY("lake*") OR AUTHKEY("river*") OR AUTHKEY("basin*") OR AUTHKEY("estuar*")) AND AUTHKEY("ecosystem*")	The text must contain Author Keywords (AUTHKEY) with either "protect*" or "conservation*", AND Author Keywords (AUTHKEY) with "water", "lake*", "river*", "basin*", or "estuar*", AND Author Keywords (AUTHKEY) with "ecosystem*".	Keywords: conservation , river protection, water ecosystem	True

4. Example Guidelines for Improving Article Alignment with SDGs

After the user inputs the text and the system processes the matching, the results are displayed as shown in the following figure:

Title
Probiotic application for sustainable aquaculture

Abstract
Aquaculture, which constitutes one of the largest food production sectors in the world, is preferably practiced with natural organic products rather than with synthetic chemicals or antibiotics. In addition to the daunting challenge of providing food and livelihood to the exponentially increasing world population, the aquaculture industry is key to ensuring that development is based on environmentally sustainable practices, specifically in the production of aquafeeds. Terrestrial microorganisms that act as natural defence systems of cultured species have been identified as the main producer for the beneficial bacterial candidates. Probiotics have recently gained popularity as beneficial microbes candidates in cultured organisms to maintain the health condition and well-being of different aquatic animals. This review aimed to understand the necessity of using probiotics as a sustainable alternative to regulate the growth performance, feed utilisation and general health condition for sustainable aquaculture. Also, explanatory discussion about the host microbiota and its ability to produce different probiotic strains and the probiotic functionality to ameliorate the host immunity to provide the interactive effects on the host-derived probiotics. By presenting the results obtained from the previous studies about the ability of probiotics to sustain the aquatic animal's performances, this study condensed the current knowledge and information for future research and development of the probiotic application in aquaculture.

Keywords
functional feed, growth promoters, immunostimulants, mode of action, probiotic, sustainable aquaculture

2025 SDG Trending Keywords **New**

SDG 12 14 matches
Your query is **strongly** matches in SDG 12.

SDG 1 SDG 2 SDG 3 SDG 4 SDG 5 SDG 6
SDG 7 SDG 8 SDG 9 SDG 10 SDG 11 SDG 12
SDG 13 SDG 14 SDG 15 SDG 16 SDG 17

```
AUTHKEY("of buildings")  
OR AUTHKEY("house")  
OR AUTHKEY("houses")  
)  
OR TITLE-ABS("sustainable aquaculture")  
OR AUTHKEY("sustainable aquaculture")  
OR TITLE-ABS("Sustainable* forest*")  
OR AUTHKEY("Sustainable* forest*")  
OR (  
  TITLE-ABS("salvaged wood")  
  AND (  
    AUTHKEY("women's employment")  
    OR (  
      TITLE-ABS("economic* polic*")  
      AND TITLE-ABS("unemployment")  
    )  
    OR (  
      AUTHKEY("economic* polic*")  
      AND AUTHKEY("unemployment")  
    )  
    OR TITLE-ABS("wage* inequalit*")  
  )  
  AND AUTHKEY("unemployment")  
)
```

Figure 9 Example of Results Before Editing

The result shows a **Partial Match**, the text can be improved to align more strongly with the desired goal, such as SDG 8 (DECENT WORK AND ECONOMIC GROWTH), by making additional text modifications.

Select the SDG 8 tab. Then, **Explore the Query** used for the search, as illustrated in the red box. User will find that for the result to return **True**, certain conditions must be met. For instance, the condition `TITLE-ABS("economic* polic*")` means that if the text contains a matching phrase such as "economic policy", "macro-economic policies", or "local economy policy" in the Title or Abstract, this condition will return **True**, resulting in the text aligning with SDG 8.

Title
Probiotic application for sustainable aquaculture

Abstract
Aquaculture, which constitutes one of the largest food production sectors in the world, is preferably practiced with natural organic products rather than with synthetic chemicals or antibiotics. In addition to the daunting challenge of providing food and livelihood to the exponentially increasing world population, the aquaculture industry is key to ensuring that development is based on environmentally sustainable practices, specifically in the production of aquafeeds. Terrestrial microorganisms that act as natural defence systems of cultured species have been identified as the main producer for the beneficial bacterial candidates. Probiotics have recently gained popularity as beneficial microbes candidates in cultured organisms to maintain the health condition and well-being of different aquatic animals. This review aimed to understand the necessity of using probiotics as a sustainable alternative to regulate the growth performance, feed utilisation and general health condition for sustainable aquaculture. Also, explanatory discussion about the host microbiota and its ability to produce different probiotic strains and the probiotic functionality to ameliorate the host immunity to provide the interactive effects on the host-derived probiotics. By presenting the results obtained from the previous studies about the ability of probiotics to sustain the aquatic animal's performances, this study condensed the current knowledge and information for future research and development of the probiotic application in aquaculture.

Keywords
functional feed, growth promoters, immunostimulants, mode of action, probiotic, sustainable aquaculture

2025 SDG Trending Keywords **New**

SDG 8 14 matches
Your query is **partially** matches in SDG 8.

SDG 1 SDG 2 SDG 3 SDG 4 SDG 5 SDG 6
SDG 7 SDG 8 SDG 9 SDG 10 SDG 11 SDG 12
SDG 13 SDG 14 SDG 15 SDG 16 SDG 17

```
OR AUTHKEY("women's employment")  
OR (  
  TITLE-ABS("economic* polic*")  
  AND TITLE-ABS("unemployment")  
)  
OR (  
  AUTHKEY("economic* polic*")  
  AND AUTHKEY("unemployment")  
)  
OR TITLE-ABS("wage* inequalit*")  
AND AUTHKEY("unemployment")  
)
```

Figure 10 Example of Results Before Editing (SDG 8)

Title
Sustainable Aquaculture with Probiotics: An Analysis of Economic Policy Implications

Abstract
Aquaculture, which constitutes one of the largest food production sectors in the world, is preferably practiced with natural organic products rather than with synthetic chemicals or antibiotics. In addition to the daunting challenge of providing food and livelihood to the exponentially increasing world population, the aquaculture industry is key to ensuring that development is based on environmentally sustainable practices, specifically in the production of aquafeeds. Terrestrial microorganisms that act as natural defence systems of cultured species have been identified as the main producer for the beneficial bacterial candidates. Probiotics have recently gained popularity as beneficial microbes candidates in cultured organisms to maintain the health condition and well-being of different aquatic animals. This review aimed to understand the necessity of using probiotics as a sustainable alternative to regulate the growth performance, feed utilisation and general health condition for sustainable aquaculture. Also, explanatory discussion about the host microbiota and its ability to produce different probiotic strains and the probiotic functionality to ameliorate the host immunity to provide the interactive effects on the host-derived probiotics. By presenting the results obtained from the previous studies about the ability of probiotics to sustain the aquatic animal's performances, this study condensed the current knowledge and information for future research and development of the probiotic application in aquaculture.

Keywords
functional feed, growth promoters, immunostimulants, mode of action, probiotic, sustainable aquaculture

2025 SDG Trending Keywords **New**

SDG 8 15 matches
Your query is **strongly** matches in SDG 8.

SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6
SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12
SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	

OR AUTHKEY("youth employment")
OR TITLE-ABS("women's employment")
OR AUTHKEY("women's employment")
OR (
TITLE-ABS("economic* polic*")
AND TITLE-ABS("unemployment")
)
OR (
AUTHKEY("economic* polic*")
AND AUTHKEY("unemployment")
)

Figure 11 Example of Results After Editing (SDG 8)

5. System Limitations

- 1) The user interface must be able to connect to the processing server via the internet or intranet.
- 2) The system cannot process an Exact Match when using the proximity commands W/n and PRE/n.
- 3) The command SRCID (Source ID) cannot be used to filter publications by source.
- 4) The command SRCTITLE (Source Title) cannot be used to filter by the name of the publication source.
- 5) The system cannot perform additional processing using a Predictive Machine Learning Model.

6. Elsevier's Academic Work Mapping to SDGs and the CMU SDGs Keyphrase Mapping System

For guidelines from Elsevier and Times Higher Education (THE), mapping academic work to the Sustainable Development Goals (SDGs) involves using Elsevier SDGs mapping Search Queries combined with a Predictive Machine Learning Model. The academic content elements considered in this evaluation include the Title, Keywords, Key Descriptors, Journal Subject Areas, and Abstracts.

The SDGs Keyphrase Mapping System developed by Chiang Mai University (CMU) operates by simulating the database search approach through Keyphrase matching using Text to evaluate academic content that has the potential to align with the Sustainable Development Goals.

However, the CMU SDGs Keyphrase Mapping System has a limitation in that it cannot achieve 100% complete matching results due to the system constraints mentioned in the previous section.

7. Dashboard 2025 SDG Trending Keywords

This Dashboard serves as a tool to display two main types of data:

1) Frequently used keywords: Keywords with High Usage Frequency in academic output within the Scopus database across different SDGs, covering the period 1996-2022.

2) The list of Keywords categorized under various SDGs.

7.1. Frequently used keywords



Figure 12 Dashboard: Frequently used keywords

Components of the Dashboard: Frequently used keywords

1) **SDG Control Panel:** This panel acts as a selection and filtering tool for data related to the Sustainable Development Goals (SDGs).



Figure 13 Control Panel

- **SDGs Icons 1-17:** Displays all 17 Sustainable Development Goals.
 - **Usage:** Users can select a specific SDG icon that they are interested in. The Dashboard will then display data relevant only to the selected SDG.
 - **Select All / Clear All Buttons:** Used to quickly select or deselect all SDGs.
- 2) Frequently Used Keywords Table, users can utilize to identify specific keywords of interest.

SDGs	Keywords	Paper with this term in Scopus	rank_in_sdg	SDG Coverage	TF-IDF
SDG-01	pro-poor	2765	1	2	19.17
SDG-02	conservation agriculture	2583	1	2	19.31
SDG-08	the environmental kuznets curve	2137	1	3	19.26
SDG-12	conservation agriculture	2583	1	2	19.32
SDG-05	dating violence	2386	2	2	19.33
SDG-12	life cycle impact	2838	2	2	19.31

Figure 14 Frequently Used Keywords Table

- Filtering Results to Cover Multi-SDG or Single-SDG

Keywords that appear in:

☒ Multi-SDG (Keywords linked to multiple SDGs)

☐ Single-SDG (Keywords linked to a single SDG)

Figure 15 Selecting Multi-SDG or Single-SDG

Table 7 Description of the Frequently Used Keywords Table

Column	Description	User Significance
SDGs	Displays the SDG associated with the keyword.	Helps identify which specific SDG this keyword is linked to.
Keywords	Displays the keyword.	Used to improve the Title, Abstract, and Keywords of user's article.
Paper with this term in Scopus	The number of documents in Scopus: The total count of research articles in the Scopus database that contain this keyword.	Indicates the frequency of use for this keyword.
rank_in_sdg	The rank of this keyword within that specific SDG (Rank 1 means it has the highest frequency of appearance in numerous articles).	Indicates that a large number of academic articles specify this keyword.

Figure 17 Example of Word Cloud Usage

7.2. List of keyword

This tool is used to examine the set of keywords that form part of the Elsevier 2025 Queries.



Figure 18 Dashboard: List of keyword

Components of the Dashboard: List of Keyword

- 1) **SDG Control Panel:** This panel acts as a selection and filtering tool for data related to the Sustainable Development Goals (SDGs).



Figure 19 Control Panel

- **SDGs Icons 1-17:** Displays all 17 Sustainable Development Goals.
- **Usage:** Users can select a specific SDG icon that they are interested in. The Dashboard will then display data relevant only to the selected SDG.
- **Select All / Clear All Buttons:** Used to quickly select or deselect all SDGs.

2) Keyword List Table

SDG	keywords
SDG-01	aboriginal income distribution*
SDG-01	aboriginal income inequalit*
SDG-01	aboriginal income inequit*
SDG-01	aboriginal income redistribution*
SDG-01	aboriginal wage distribution*
SDG-01	aboriginal wage inequalit*
SDG-01	aboriginal wage inequit*
SDG-01	aboriginal wage redistribution*
SDG-01	aboriginal wealth distribution*
SDG-01	aboriginal wealth inequalit*
SDG-01	aboriginal wealth inequit*
SDG-01	aboriginal wealth redistribution*
SDG-01	access basic service poor people

Figure 20 Keyword List Table

- 3) Search for Keyword: This search bar is located in the top-right corner. User can enter specific terms to find keywords of interest and see which SDGs they are linked to.

Figure 21 Search for Keyword

- 4) Multi-SDG / Single-SDG: This filter allows user to restrict the displayed keywords to show only those linked to multiple goals (**Multi-SDG**) or those linked to a single goal (**Single-SDG**).

Keywords that appear in:

Multi-SDG
Single-SDG

Figure 22 Selecting both Multi-SDG and Single-SDG

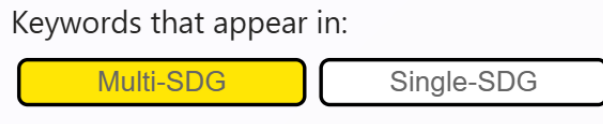


Figure 23 Selecting Multi-SDG Only

5) Keyword Label: This option allows user to filter the type of keywords displayed, specifically choosing between **Restricting Keywords** or **Target Keywords**.

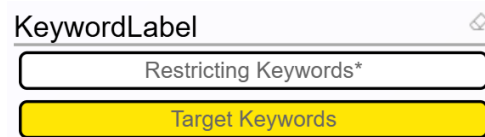


Figure 24 Keyword Label

- Restricting Keywords: These keywords are typically placed in the **AND NOT** part of the Queries and serve as a filter to exclude results. If the article contains these keywords, and they appear in the AND NOT section of the Query being used, the match may be canceled (**Unmatched**).

6) Visualization: Count of keywords by SDG. This visualization summarizes the total number of keywords grouped under each selected SDG.

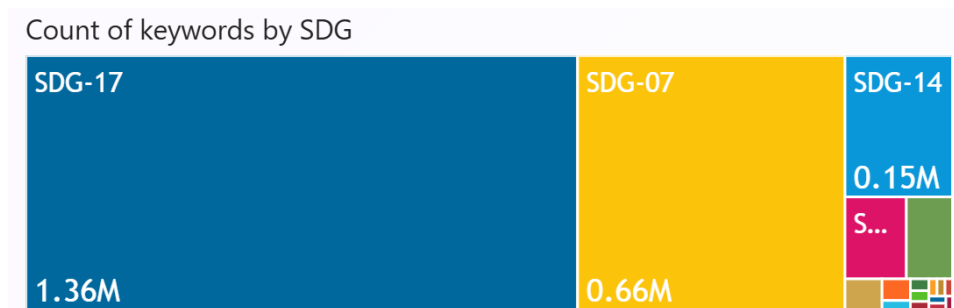


Figure 25 Count of keywords by SDG

8. Wordcloud

This section presents the Wordcloud of terms that appear most frequently in Titles, Abstracts, and Author-defined keywords for each SDG, based on the dataset used to develop the **Elsevier 2025 Sustainable Development Goals (SDGs) Mapping**.

8.1. SDG 1: NO POVERTY

SDG 1 – No Poverty



Figure 26 Wordcloud SDG1

Table 8 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-1)

Term	Number of publications in set	ratio
poverty.	11470	2.174
income inequality	10835	2.054
and poverty	10558	2.001
social welfare	9405	1.783
social security	8912	1.689
social policy	8328	1.579
income distribution	7739	1.467
poverty reduction	7439	1.410
welfare state	7267	1.378
poverty alleviation	6504	1.233
al exclusion	6218	1.179
social protection	5887	1.116
social exclusion	5634	1.068
microfin	4083	0.774
microfinance	4025	0.763
uninsured	3999	0.758
food insecurity	3866	0.733
safety net	3580	0.679
insurance cover	3182	0.603

Term	Number of publications in set	ratio
insurance coverage	3107	0.589
poverty line	3104	0.588
welfare reform	3094	0.587
social policies	2942	0.558
poverty rate	2905	0.551
financial inclusion	2785	0.528
the welfare state	2719	0.515
pro-poor	2441	0.463
and unemployment	2431	0.461
fare system	2362	0.448
welfare system	2358	0.447
gini coefficient	2248	0.426
extreme poverty	2177	0.413
welfare states	2130	0.404
poverty level	2107	0.399
health insurance coverage	2014	0.382
economic inequality	1990	0.377
unemployment.	1842	0.349
rural house	1783	0.338
rural household	1770	0.336
microfinance institution	1752	0.332
energy poverty	1748	0.331
poor people	1745	0.331
poverty rates	1743	0.330
finance institutions	1722	0.326
social welfare.	1713	0.325
poor household	1693	0.321
urban poverty	1653	0.313
welfare program	1637	0.310
poverty and inequality	1633	0.310
poor households	1625	0.308
universal health	1625	0.308
age inequality	1597	0.303
redistributive	1585	0.300
microfinance institutions	1578	0.299
rural poverty	1571	0.298
wage inequality	1566	0.297
pension plan	1547	0.293
social security system	1526	0.289
rural households	1519	0.288
gender inequality	1517	0.288
millennium development	1513	0.287

Term	Number of publications in set	ratio
social insurance	1504	0.285
millennium development goal	1502	0.285
employment insurance	1478	0.280
affordable care	1473	0.279
social assistance	1459	0.277
pension reform	1452	0.275
affordable care act	1451	0.275
wealth distribution	1432	0.271
unemployment insurance	1429	0.271
insurance scheme	1423	0.270
fare policy	1413	0.268
social safety	1406	0.267
welfare policy	1391	0.264
insurance program	1389	0.263
cash transfer	1381	0.262
microcredit	1377	0.261
reducing poverty	1361	0.258
income groups	1358	0.257
formal sector	1354	0.257
health cover	1324	0.251
distribution of income	1313	0.249
employment rates	1308	0.248
equality of opportunity	1302	0.247
health coverage	1302	0.247
millennium development goals	1290	0.245
social investment	1288	0.244
social care services	1287	0.244
public pension	1266	0.240
living in poverty	1244	0.236
alleviate poverty	1237	0.234
the gini coefficient	1222	0.232
insurance system	1214	0.230
economic inequalities	1209	0.229
wealth inequality	1195	0.227
family policy	1194	0.226
poverty measure	1181	0.224
social vulnerability	1176	0.223
economic empowerment	1156	0.219
informal sector	1140	0.216

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

8.2. SDG 2: ZERO HUNGER

SDG 2 – Zero Hunger

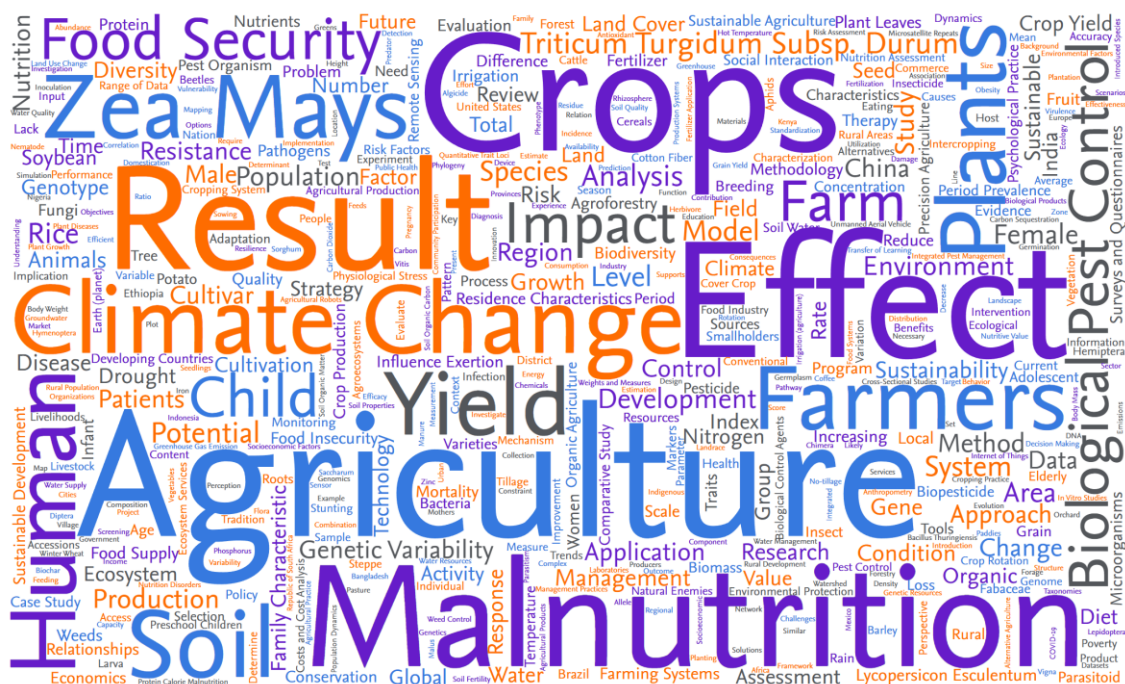


Figure 27 Wordcloud SDG2

Table 9 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-2)

Term	Number of publications in set	ratio
biocontrol	20910	1.678
smallholder	14640	1.175
pest management	14343	1.151
sustainable agriculture	12866	1.033
food insecurity	12633	1.014
control agents	11714	0.940
biocontrol agent	11272	0.905
crop rotation	10867	0.872
integrated pest	10687	0.858
natural enemies	10615	0.852
grof	10546	0.846
integrated pest management	10502	0.843
agroforest	10407	0.835
cropping systems	10342	0.830
precision ag	10065	0.808
agroforestry	9901	0.795
precision agriculture	9840	0.790
intercrop	9746	0.782
farming system	9684	0.777

Term	Number of publications in set	ratio
biological control agent	9473	0.760
malnutrition.	9461	0.759
organic farm	9450	0.759
malnourish	9426	0.757
genetic resources	9028	0.725
stunting	8780	0.705
malnourished	8752	0.702
cover crop	8066	0.647
undernutrition	7959	0.639
smallholder farm	7908	0.635
organic farming	7886	0.633
intercropping	7846	0.630
agricultural productivity	7567	0.607
farming systems	7343	0.589
agroecosystem	7034	0.565
agricultural system	7001	0.562
farmers'	6746	0.541
older farmers	6407	0.514
biocontrol agents	6289	0.505
smallholder farmer	6182	0.496
resistant cultivar	6174	0.496
smallholder farmers	5999	0.482
cover crops	5607	0.450
agricultural systems	5576	0.448
global food	5456	0.438
biological control agents	5266	0.423
agroecosystems	5035	0.404
sustainable agricultural	4988	0.400
small farm	4882	0.392
resistant cultivars	4651	0.373
landraces	4618	0.371
crop management	4576	0.367
agroforestry system	4382	0.352
nutritional assessment	4343	0.349
green man	4189	0.336
organic product	4150	0.333
conventional till	4121	0.331
smallholders	4117	0.330
wild relative	4052	0.325
conventional tillage	3964	0.318
nutritional risk	3921	0.315
green manure	3855	0.309

Term	Number of publications in set	ratio
household food	3842	0.308
farming practice	3781	0.303
natural enemy	3713	0.298
agricultural intensification	3700	0.297
conservation tillage	3681	0.295
agricultural policy	3676	0.295
intercropped	3652	0.293
organic system	3604	0.289
forestry systems	3561	0.286
crop rotations	3550	0.285
sustainable agriculture.	3522	0.283
tillage system	3515	0.282
organic agriculture	3494	0.280
no-tillage	3483	0.280
agroforestry systems	3437	0.276
agroecology	3423	0.275
organic production	3375	0.271
farming practices	3365	0.270
wild relatives	3263	0.262
agri-environment	3236	0.260
sustainable food	3184	0.256
food and nutrition	3168	0.254
soil health	3094	0.248
organic and conventional	3022	0.243
agroecological	3019	0.242
global food security	2931	0.235
small-scale farm	2880	0.231
risk of malnutrition	2793	0.224
intercropping system	2773	0.223
agricultural management	2761	0.222
germplasm collection	2731	0.219
integrated pest management (ipm)	2698	0.217
agro-ecological	2683	0.215
precision farming	2682	0.215
opast	2679	0.215
reduced till	2624	0.211
undernourished	2589	0.208
small farmer	2554	0.205
food price	2500	0.201

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

8.3. SDG 3: GOOD HEALTH AND WELL-BEING

SDG 3 – Good Health and Well-being

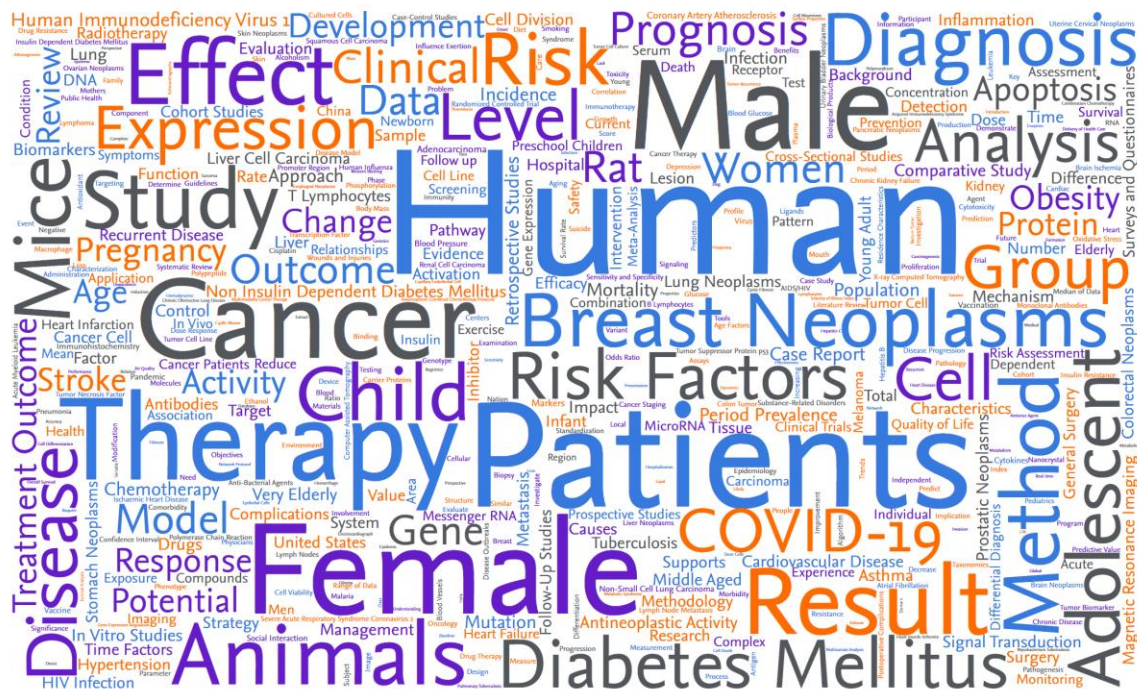


Figure 28 Wordcloud SDG3

Table 10 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-3)

Term	Number of publications in set	ratio
sustained virological response	5486	0.237
virologic response	5129	0.222
cancer network	5074	0.220
chronic hepatitis b (chb)	4943	0.214
anaplastic lymphoma kinase	4883	0.211
risk of type 2 diabetes	4860	0.210
latent tuberculosis	4648	0.201
allergy, asthma	4632	0.200
obesity epidemic	4619	0.200
targeted cancer	4614	0.200
cancer cell migration	4564	0.197
response evaluation criteria	4544	0.197
community-acquired pneumonia (cap)	4523	0.196
metastasis-free survival	4469	0.193
egfr-tk	4411	0.191
prostate cancer cell lines	4391	0.190
cancer quality of life	4378	0.189
adjuvant chemoradiotherapy	4370	0.189

Term	Number of publications in set	ratio
early-stage breast cancer	4366	0.189
cancer outcomes	4361	0.189
obesity and type 2 diabetes	4355	0.188
ipilimumab	4289	0.186
papillary thyroid carcinoma (ptc)	4280	0.185
stroke severity	4247	0.184
cancer resistance	4218	0.182
stroke treatment	4192	0.181
egfr-tki	4187	0.181
asthma exacerbations	4165	0.180
risk of obesity	4165	0.180
advanced rectal cancer	4136	0.179
type 2 diabetes (t2dm)	4104	0.178
microsatellite instability (msi)	4088	0.177
type 1 diabetes mellitus (t1dm)	4087	0.177
ductal carcinoma in situ (dcis)	4081	0.177
overweight or obesity	4053	0.175
stroke outcome	4034	0.175
diabetes prevention	4028	0.174
muscle-invasive bladder cancer	4023	0.174
cardiovascular disease (cvd) risk	4003	0.173
hcc cell lines	3974	0.172
interstitial lung disease (ild)	3967	0.172
hiv diagnosis	3946	0.171
response evaluation criteria in solid tumor	3943	0.171
type 1 and type 2 diabetes	3937	0.170
folfox	3929	0.170
combination antiretroviral therapy	3925	0.170
mcf-7 breast cancer cells	3920	0.170
5-year overall survival rate	3913	0.169
pathological complete response	3901	0.169
breast cancer metastasis	3890	0.168
muscle invasive	3887	0.168
prostate cancer risk	3887	0.168
art initiation	3886	0.168
national comprehensive cancer network	3885	0.168
immune-related adverse events	3861	0.167
european organization for research and treatment of cancer	3853	0.167
breast cancer subtype	3833	0.166

Term	Number of publications in set	ratio
xenograft tumors	3833	0.166
stroke care	3830	0.166
pc-3 cells	3826	0.166
acute ischemic stroke (ais)	3823	0.165
cancer predisposition	3818	0.165
obesity risk	3817	0.165
cancer cell death	3816	0.165
mouse xenograft model	3816	0.165
adult cancer	3813	0.165
response evaluation criteria in solid tumors	3810	0.165
dengue virus (denv)	3791	0.164
anti-cancer effects	3767	0.163
acute stroke patients	3762	0.163
egfr tyrosine kinase	3755	0.162
obesity prevalence	3755	0.162
diabetes and cardiovascular disease	3748	0.162
stomach neoplasms	3733	0.161
sustained virologic response	3715	0.161
persistent asthma	3711	0.161
european society for medical oncology	3697	0.160
obesity treatment	3689	0.160
anticancer therapies	3679	0.159
obesity and insulin resistance	3673	0.159
cancer resection	3670	0.159
national cancer database	3666	0.159
cvd event	3654	0.158
aggressive cancer	3635	0.157
advanced non-small cell lung cancer (nsclc)	3634	0.157
objective response rate (orr)	3629	0.157
cardiovascular diseases (cvds)	3620	0.157
cancer development and progression	3617	0.156
lung cancer screen	3595	0.156
large b cell lymphoma	3582	0.155
lung cancer screening	3580	0.155
suicide idea	3578	0.155
highly pathogenic avian influenza	3575	0.155
rectal cancer surgery	3571	0.154
nonsmall cell	3557	0.154
epithelial ovarian cancer (eoc)	3552	0.154
cancer-related mortality	3539	0.153

Term	Number of publications in set	ratio
internship	8095	0.714
students' learning	7818	0.689
environmental education	7651	0.675
school environment	6840	0.603
inclusive education	6814	0.601
vocational education	6518	0.575
education reform	6413	0.565
apprentice	6365	0.561
employability	6120	0.540
virtual learning	6063	0.535
apprentices	6047	0.533
educational reform	5831	0.514
students with disabilities	5816	0.513
cesh	5781	0.510
apprenticeship	5746	0.507
vocational training	5743	0.506
blended learning	5733	0.506
e-learning system	5699	0.503
reading skill	5512	0.486
student achievement	5312	0.468
learning platform	5308	0.468
earning management	4860	0.429
learning management	4858	0.428
writing skill	4839	0.427
reading skills	4775	0.421
dyslexia	4734	0.417
virtual learning environment	4670	0.412
writing skills	4481	0.395
learning management system	4408	0.389
learning outcomes.	4403	0.388
problem-based learning	4368	0.385
soft skill	4354	0.384
interactive learning	4308	0.380
teaching quality	4240	0.374
competency-based	4187	0.369
soft skills	4181	0.369
academic performance.	4169	0.368
students' learning	4160	0.367
education need	4132	0.364
phonological awareness	4093	0.361
learning styles	4065	0.358
education quality	4026	0.355

Term	Number of publications in set	ratio
special educational	4010	0.354
quality education	3860	0.340
learning environments.	3823	0.337
general education	3800	0.335
special educational need	3719	0.328
practical training	3706	0.327
special educational needs	3655	0.322
surgical training	3601	0.318
professional learning	3590	0.317
literacy skill	3587	0.316
professional competence	3511	0.310
literacy skills	3470	0.306
education needs	3376	0.298
education learning	3327	0.293
educational strategies	3305	0.291
learning motivation	3253	0.287
internships	3213	0.283
e-learning environment	3159	0.279
online teaching	3151	0.278
learning course	3136	0.277
classroom teaching	3132	0.276
academic achievement.	3114	0.275
learning education	3102	0.274
word reading	3077	0.271
education for sustainable	3048	0.269
learning need	3039	0.268
learning materials	3017	0.266
e-learning systems	3010	0.265
quality of education	2991	0.264
citizenship education	2955	0.261
education for sustainable development	2939	0.259
learning activity	2914	0.257
school building	2901	0.256
professional skill	2894	0.255
learning needs	2885	0.254
traditional teaching	2885	0.254
moodle	2881	0.254
quality of teaching	2879	0.254
teaching effect	2828	0.249
learning content	2748	0.242
learning gain	2732	0.241

Term	Number of publications in set	ratio
active learning environment	2724	0.240
flipped class	2723	0.240
student-centered	2717	0.240
e-learning platform	2711	0.239
professional skills	2711	0.239
learning resources	2702	0.238
vocational education and training	2692	0.237
teacher profession	2671	0.236

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

8.5. SDG 5: GENDER EQUALITY

SDG 5 – Gender Equality

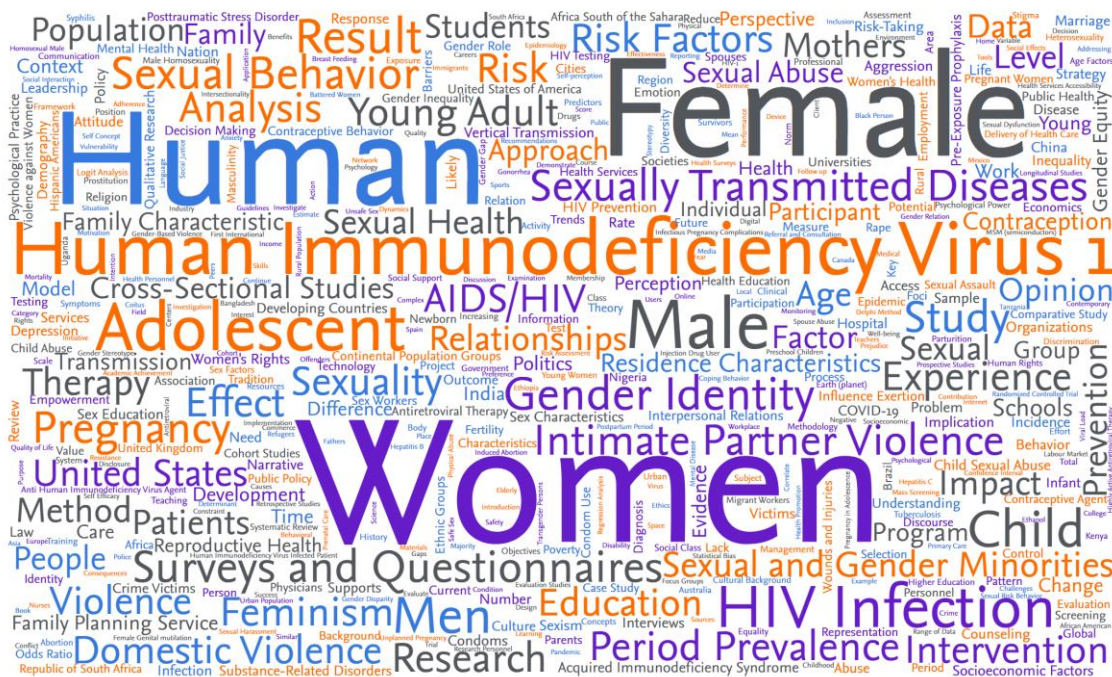


Figure 30 Wordcloud SDG5

Table 12 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-5)

Term	Number of publications in set	ratio
condom	18644	1.661
domestic violence	17405	1.551
intimate partner	16415	1.463
partner violence	16039	1.429
hiv prevention	15751	1.403

Term	Number of publications in set	ratio
sexual health	15396	1.372
intimate partner violence	14855	1.324
gender equality	12509	1.115
sexually transmitted infection	11385	1.014
hiv transmission	11215	0.999
condom use	11171	0.995
men who have sex with men	10304	0.918
against women	9802	0.873
violence against	9555	0.851
hiv test	8907	0.794
sexually transmitted infections	8806	0.785
sexual risk	8638	0.770
sexual partner	8530	0.760
condoms	8088	0.721
hiv testing	7788	0.694
intimate partner violence (ipv)	7756	0.691
sexual violence	7550	0.673
violence against women	7505	0.669
sexual partners	7189	0.641
gender inequality	6833	0.609
hiv risk	6654	0.593
gender gap	6594	0.588
men who have sex with men (msm)	6190	0.552
transmission of hiv	6180	0.551
sexual assault	6071	0.541
gender-based	6007	0.535
child sex	5965	0.531
child sexual	5808	0.517
sexual and reproductive	5799	0.517
mother-to-child	5781	0.515
sex work	5748	0.512
child sexual abuse	5566	0.496
sexism	5281	0.471
exposure prophylaxis	5272	0.470
sexual and reproductive health	5196	0.463
intersectionality	5045	0.449
mother-to-child transmission	4985	0.444
sex worker	4893	0.436
sex workers	4680	0.417
hiv prevalence	4664	0.416
gender stereotype	4626	0.412
sexual behaviors	4416	0.393

Term	Number of publications in set	ratio
gender stereotypes	4312	0.384
hiv epidemic	4097	0.365
gender bias	3995	0.356
sexual risk behavior	3969	0.354
hiv infections	3932	0.350
sex ed	3863	0.344
sex education	3795	0.338
gender issue	3733	0.333
sex partner	3657	0.326
pre-exposure prophylaxis	3641	0.324
sexual transmission	3618	0.322
childhood sexual abuse	3524	0.314
gender-based violence	3513	0.313
gender issues	3511	0.313
sexual harassment	3493	0.311
intended pregnancy	3357	0.299
unintended pregnancy	3340	0.298
feminist theory	3336	0.297
risky sex	3286	0.293
perpetration	3270	0.291
gender relation	3248	0.289
mtct	3210	0.286
gender equity	3202	0.285
protected sex	3199	0.285
gender relations	3193	0.284
sexually transmitted infections (stis)	3170	0.282
physical violence	3135	0.279
gender inequalities	3102	0.276
sex partners	3071	0.274
unprotected sex	3039	0.271
risk behaviour	2953	0.263
representation of women	2892	0.258
stds	2889	0.257
prevalence of hiv	2872	0.256
male sex work	2778	0.248
male sex worker	2752	0.245
patriarchy	2732	0.243
feminists	2728	0.243
aids prevention	2713	0.242
pre-exposure prophylaxis (prep)	2707	0.241
gender discrimination	2706	0.241
male sex workers	2703	0.241

Table 13 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-6)

Term	Number of publications in set	ratio
wastewater treatment plants	16139	0.980
wastewater treatment.	15057	0.914
industrial wastewater	14821	0.900
contaminated water	13478	0.818
wwt	13094	0.795
water scarcity	12578	0.764
wwtp	12361	0.751
municipal wastewater	12350	0.750
water contamination	11916	0.724
water resources management	10093	0.613
constructed wetland	9934	0.603
groundwater quality	9207	0.559
water desalination	8987	0.546
water treatment process	8714	0.529
treated wastewater	8172	0.496
water reuse	8104	0.492
water quality parameter	8065	0.490
water quality parameters	7709	0.468
water resource management	7174	0.436
constructed wetlands	6976	0.424
sequencing batch	6971	0.423
water treatment system	6862	0.417
water and wastewater	6734	0.409
polluted water	6555	0.398
domestic wastewater	6494	0.394
framework directive	6387	0.388
wwtps	6319	0.384
sequencing batch reactor	6308	0.383
water framework	6301	0.383
water framework directive	6236	0.379
water quality monitor	6229	0.378
water quality monitoring	6181	0.375
water management.	6158	0.374
sewage treatment plant	6143	0.373
groundwater sample	6142	0.373
water supply system	6142	0.373
total suspended solid	6110	0.371
and wastewater treatment	6042	0.367
groundwater samples	5864	0.356
phosphorus removal	5812	0.353

Term	Number of publications in set	ratio
source pollution	5804	0.352
sustainable water	5792	0.352
drinking water treatment	5779	0.351
non-point	5695	0.346
management of water	5658	0.344
treatment of wastewater	5647	0.343
groundwater contamination	5582	0.339
total suspended solids	5503	0.334
nutrient removal	5484	0.333
wastewater treatment process	5457	0.331
waste water treatment	5378	0.327
water harvest	5365	0.326
municipal wastewater treatment	5332	0.324
irrigation management	5294	0.321
water saving	5263	0.320
water harvesting	5236	0.318
cultural water	5198	0.316
agricultural water	5157	0.313
point source pollution	5155	0.313
bod5	5141	0.312
quality water	5072	0.308
water productivity	5003	0.304
water remediation	4970	0.302
biochemical oxygen demand	4960	0.301
non-point source	4911	0.298
contaminated ground	4876	0.296
water effluent	4862	0.295
synthetic waste	4792	0.291
synthetic wastewater	4649	0.282
wastewater treatment system	4649	0.282
water treatment processes	4618	0.280
water pollutant	4617	0.280
reverse osmosis (ro)	4576	0.278
integrated water	4539	0.276
wastewater sample	4527	0.275
seawater desalination	4509	0.274
contaminated groundwater	4485	0.272
wastewater discharge	4480	0.272
deficit irrigation	4444	0.270
wastewater treatment plants (wwtps)	4422	0.269
wastewater effluent	4351	0.264
stormwater management	4197	0.255

Term	Number of publications in set	ratio
water quality index	4172	0.253
water treatment systems	4111	0.250
water security	4093	0.249
water pollution.	4084	0.248
drinking water quality	4083	0.248
water-saving	4081	0.248
water quality model	4070	0.247
desalination plant	4054	0.246
wastewater samples	4010	0.243
water allocation	3904	0.237
nonpoint	3861	0.234
tile waste	3848	0.234
textile waste	3817	0.232
effluent treatment	3812	0.231
water infrastructure	3723	0.226
treated effluent	3703	0.225
groundwater pollution	3692	0.224
drinking water source	3680	0.223

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

8.7. SDG 7: AFFORDABLE AND CLEAN ENERGY

SDG 7 – Affordable and Clean Energy

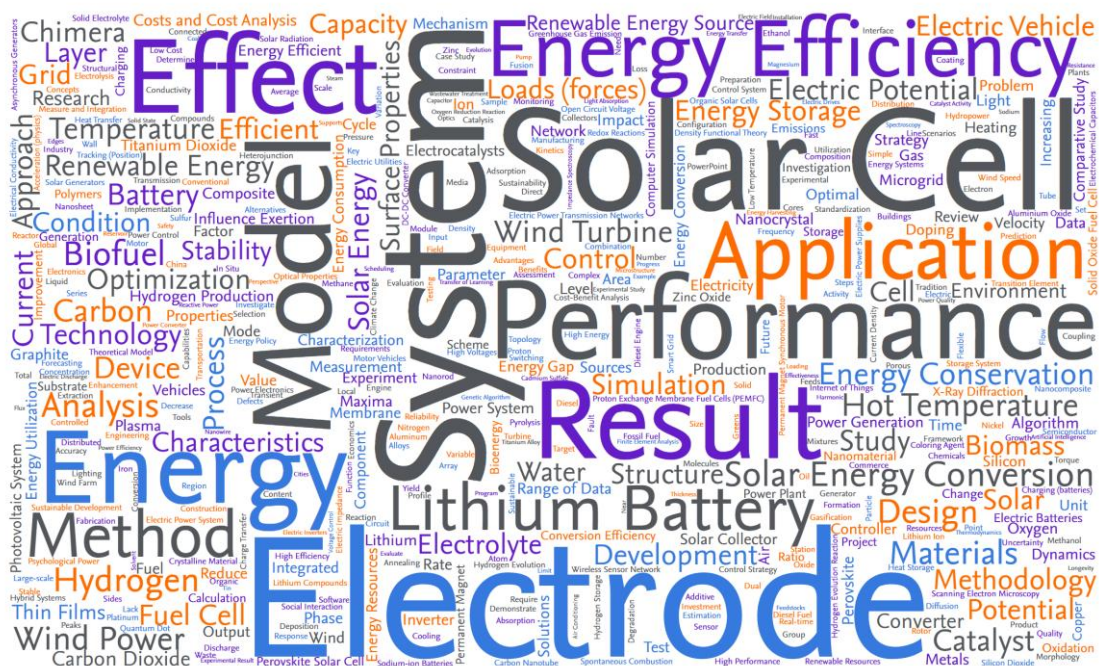


Figure 32 Wordcloud SDG7

Table 14 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-7)

Term	Number of publications in set	ratio
sofcs	8987	0.423
photocatalytic hydrogen	8155	0.384
methanol fuel cell	7793	0.367
direct methanol	7718	0.363
polymer solar cell	7711	0.363
direct methanol fuel cell	7432	0.350
sulfur batteries	7403	0.348
sodium-ion batteries	7387	0.348
lithium-ion batteries (libs)	7363	0.347
pv panel	7335	0.345
offshore wind turbine	7235	0.341
(pemfc)	7225	0.340
photovoltaic applications	7115	0.335
heterojunction solar cell	7049	0.332
polymer solar cells	7026	0.331
perovskite solar cells (pscs)	6987	0.329
air batteries	6961	0.328
renewable energy sources.	6843	0.322
thin film solar cell	6716	0.316
microbial fuel cells	6671	0.314
synchronous motor (pmsm)	6632	0.312
photovoltaic panel	6621	0.312
h2 evolution	6596	0.311
lithium-sulfur	6556	0.309
energy crop	6447	0.303
biomass gas	6428	0.303
dye-sensitized solar cells (dsscs)	6364	0.300
renewable energy systems	6292	0.296
lithium storage	6291	0.296
short-circuit current density	6167	0.290
catalytic hydrogen evolution	6164	0.290
permanent magnet synchronous motor (pmsm)	6045	0.285
proton exchange membrane fuel cells	5993	0.282
photovoltaic properties	5954	0.280
biofuels.	5901	0.278
generator (dfig)	5870	0.276
solid oxide fuel cell (sofc)	5868	0.276
heterojunction solar cells	5865	0.276
fuel cell application	5843	0.275

Term	Number of publications in set	ratio
offshore wind farm	5839	0.275
charging stations	5796	0.273
permanent magnet synchronous machine	5776	0.272
bioethanol production	5760	0.271
biomass gasification	5694	0.268
pv cell	5679	0.267
dye sensitize	5650	0.266
vehicle charging	5569	0.262
doubly fed induction generator	5560	0.262
power conversion efficiencies	5527	0.260
ev charging	5506	0.259
wind generation	5367	0.253
solar cell application	5361	0.252
thin film solar cells	5357	0.252
hvdc system	5346	0.252
dmfc	5293	0.249
solar photovoltaic (pv)	5220	0.246
plug-in hybrid	5182	0.244
polymer electrolyte membrane fuel cell	5162	0.243
wave energy converter	5148	0.242
organic photovoltaics	5145	0.242
green technology	5135	0.242
wind generator	5119	0.241
dye sensitized	5114	0.241
high voltage direct current	5108	0.240
ethanol fuel cells	5045	0.237
pemfcs	5013	0.236
electric vehicle charging	4957	0.233
photovoltaic modules	4957	0.233
thin-film solar	4909	0.231
photovoltaic (pv) systems	4902	0.231
lithium-sulfur batteries	4901	0.231
initial discharge capacity	4826	0.227
dye sensitized solar cell	4790	0.225
air battery	4730	0.223
fuel cell performance	4724	0.222
high energy efficiency	4723	0.222
polymer electrolyte fuel cell	4699	0.221
thin-film solar cell	4698	0.221
photovoltaics.	4673	0.220

Term	Number of publications in set	ratio
renewable energy generation	4657	0.219
si solar cell	4635	0.218
li-ion batteries.	4616	0.217
fast pyrolysis	4614	0.217
photovoltaic solar	4608	0.217
battery anode	4605	0.217
fuel cell applications	4599	0.216
high reversible capacity	4578	0.216
photovoltaic panels	4570	0.215
permanent magnet synchronous generator	4487	0.211
cathode catalyst	4482	0.211
offshore wind turbines	4482	0.211
hybrid vehicles	4468	0.210
improve energy efficiency	4429	0.208
hydrogen storage material	4406	0.207
wind power plant	4376	0.206
parabolic trough	4368	0.206
renewable energy sources (res)	4363	0.205
fill factor (ff)	4358	0.205
renewable energy technologies	4342	0.204
fuel cell stack	4338	0.204

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

SDG 8 – Decent Work and Economic Growth



Term	Number of publications in set	ratio
human capita	32924	3.022
human capital	32919	3.021
labour market	28851	2.648
labor market	28170	2.585
economic growth.	16406	1.506
and economic growth	13995	1.284
sustainable agriculture	12979	1.191
the labour market	11189	1.027
regional development	10699	0.982
the labor market	10589	0.972
crop productivity	10306	0.946
occupational safety	10259	0.941
and sustainable development	9882	0.907
agricultural productivity	7591	0.697
tourism development	7078	0.650
factor productivity	6757	0.620
occupational safety and health	6750	0.619
regional economic	6564	0.602
total factor	6510	0.597

Term	Number of publications in set	ratio
productivity growth	6253	0.574
total factor productivity	6234	0.572
technological progress	6149	0.564
socio-economic development	5921	0.543
sustainable tourism	5867	0.538
labor markets	5595	0.513
ecotour	5537	0.508
ecotourism	5444	0.500
labour market.	5051	0.464
labour markets	5037	0.462
the economic growth	4986	0.458
sustainable agricultural	4979	0.457
the economic development	4962	0.455
labor productivity	4538	0.416
development policy	4391	0.403
microfin	4346	0.399
self-employment	4333	0.398
microfinance	4278	0.393
minimum wage	4230	0.388
carbon tax	4206	0.386
development policies	4129	0.379
sustainable economic	4123	0.378
labour force	4110	0.377
job creation	4033	0.370
kuznets	3946	0.362
sustainable development goals (sdgs)	3666	0.336
kuznets curve	3646	0.335
industrial policy	3606	0.331
sustainable agriculture.	3550	0.326
local economic	3486	0.320
the sustainable development goals	3472	0.319
environmental kuznets	3345	0.307
environmental kuznets curve	3297	0.303
market outcome	3230	0.296
carbon economy	3192	0.293
the human capital	3189	0.293
eco-efficiency	3175	0.291
job search	3174	0.291
labour productivity	3161	0.290
market outcomes	3156	0.290
capital accumulation	3134	0.288
financial literacy	3132	0.287

Term	Number of publications in set	ratio
human traffic	3092	0.284
gdp growth	3080	0.283
rapid economic growth	3076	0.282
human trafficking	3069	0.282
financial development	3057	0.281
endogenous growth	3035	0.279
regional economic development	3026	0.278
intec	3025	0.278
intech	3014	0.277
fintech	3004	0.276
social and economic development	2984	0.274
green economy	2968	0.272
tourism destination	2942	0.270
financial inclusion	2903	0.266
self-employed	2830	0.260
environmental cost	2829	0.260
sustainable growth	2809	0.258
job insecurity	2723	0.250
cultural tourism	2717	0.249
formal sector	2653	0.243
malmquist	2645	0.243
formal economy	2643	0.243
energy policies	2583	0.237
tourism sector	2578	0.237
employment rates	2575	0.236
wage gap	2552	0.234
rural tourism	2545	0.234
informal economy	2536	0.233
occupational injuries	2518	0.231
cultural sustainability	2469	0.227
labor supply	2445	0.224
employment growth	2399	0.220
environmental economic	2397	0.220
access to credit	2356	0.216
regional policy	2328	0.214
autoregressive distributed lag	2321	0.213
local economic development	2319	0.213
total factor productivity (tfp)	2296	0.211
informal sector	2268	0.208

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

SDG 9 – Industry, Innovation and Infrastructure



Figure 34 Wordcloud SDG9

Table 16 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-9)

Term	Number of publications in set	ratio
micromachining	17027	1.072
icrofabrication	12865	0.810
microfabrication	12865	0.810
manufacturing process.	12690	0.799
manufacturing cost	12665	0.797
life cycle assessment (lca)	12535	0.789
manufacturing technology	11517	0.725
internet access	11112	0.700
additive manufacturing (am)	10774	0.678
manufacturing firm	10510	0.662
manufacturing sector	10426	0.656
manufacturing industries	10266	0.646
laser melting	10235	0.644
manufacturing technique	10074	0.634
manufacturing companies	9893	0.623
discharge machining	9784	0.616
elective laser melting	9568	0.602
selective laser melting	9568	0.602
manufacturing firms	9491	0.598

Term	Number of publications in set	ratio
manufacturing method	9467	0.596
nanofab	8959	0.564
nanofabric	8952	0.564
nanofabrication	8898	0.560
design and manufacturing	8714	0.549
digital divide	7893	0.497
powder bed	7780	0.490
innovation system	7763	0.489
semiconductor manufacturing	7287	0.459
port infrastructure	7242	0.456
structure project	7237	0.456
infrastructure project	7212	0.454
product innovation	7008	0.441
laser clad	6962	0.438
laser cladding	6941	0.437
fused deposition	6932	0.436
manufacturing environment	6844	0.431
open innovation	6842	0.431
manufacturing technologies	6760	0.426
manufacturing plan	6744	0.425
manufacturing techniques	6655	0.419
fused deposition model	6591	0.415
sport infrastructure	6572	0.414
transport infrastructure	6558	0.413
ic manufacturing	6511	0.410
powder bed fusion	6437	0.405
electrical discharge machining	6320	0.398
industrial internet	6154	0.387
infrastructure projects	6012	0.379
additively manufactured	5927	0.373
manufacturing enterprise	5824	0.367
laser sinter	5807	0.366
emanufacturing	5770	0.363
manufacturing plant	5765	0.363
selective laser melting (slm)	5751	0.362
industrial robots	5737	0.361
laser sintering	5716	0.360
remanufacturing	5641	0.355
transportation infrastructure	5493	0.346
manufacturing practice	5357	0.337
green infrastructure	5354	0.337
manufacturing costs	5319	0.335

Term	Number of publications in set	ratio
nc machine	5166	0.325
manufacturing methods	5161	0.325
fourth industrial	5156	0.325
infrastructure system	5154	0.324
fourth industrial revolution	5110	0.322
manufacturing company	5109	0.322
industrial automation	5088	0.320
deposition modeling	4972	0.313
industrial internet of thing	4920	0.310
industrial internet of things	4899	0.308
fused deposition modeling	4796	0.302
advanced manufacturing	4768	0.300
stereolithography	4765	0.300
cnc machine	4751	0.299
us manufacturing	4723	0.297
the manufacturing sector	4627	0.291
road infrastructure	4556	0.287
additive manufacturing process	4540	0.286
lean manufacturing	4494	0.283
industry 4.0.	4385	0.276
manufacturing enterprises	4369	0.275
iiot	4274	0.269
innovation systems	4252	0.268
laser powder bed	4250	0.268
the fourth industrial revolution	4218	0.266
infrastructure investment	4213	0.265
laser powder bed fusion	4173	0.263
process innovation	4102	0.258
urban infrastructure	4101	0.258
cleaner product	4067	0.256
smart manufacturing	4052	0.255
lean production	4048	0.255
internet service provider	4044	0.255
cleaner production	4038	0.254
industrial control system	4030	0.254
distributed control system	3973	0.250
good manufacturing	3934	0.248
reverse logistic	3929	0.247
the digital divide	3929	0.247

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

8.10. SDG 10: REDUCED INEQUALITIES

SDG 10 – Reduced Inequality

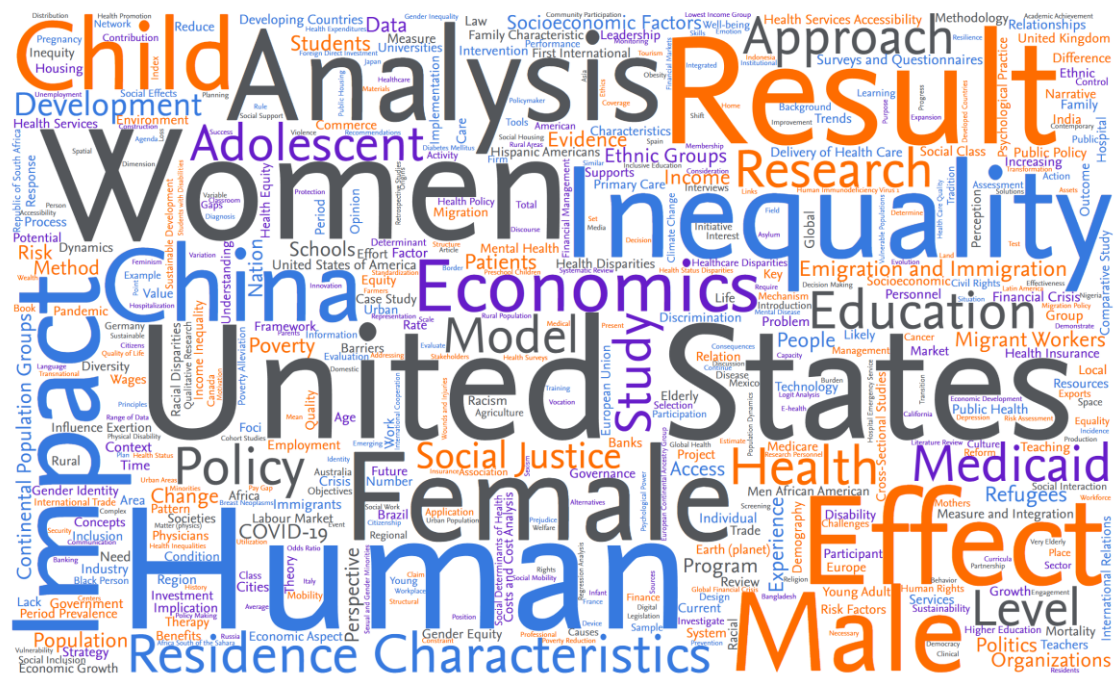


Figure 35 Wordcloud SDG10

Table 17 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-10)

Term	Number of publications in set	ratio
financial crisis	32727	2.859
caid	27061	2.364
medicaid	27024	2.360
social justice	26915	2.351
health disparities	20739	1.811
access to he	14876	1.299
access to health	14785	1.291
gender equality	12485	1.091
inequities	10937	0.955
income inequality	10883	0.951
global financial crisis	10785	0.942
social inclusion	9986	0.872
asylum	9478	0.828
the financial crisis	9055	0.791
health inequalities	8619	0.753
civil right	8184	0.715
social integration	8170	0.714
income distribution	8155	0.712
access to health care	8087	0.706
civil rights	8076	0.705

Term	Number of publications in set	ratio
racial disparities	7607	0.664
care access	7592	0.663
health equity	7557	0.660
financial crisis.	7542	0.659
the global financial crisis	7481	0.653
poverty reduction	7468	0.652
migrant work	7445	0.650
migrant worker	7353	0.642
social inequalities	7171	0.626
social inequality	7085	0.619
migrant workers	6933	0.606
gender inequality	6827	0.596
inclusive education	6797	0.594
poverty alleviation	6534	0.571
and social justice	6353	0.555
universal health	6069	0.530
asylum seeker	5981	0.522
ethnic disparities	5877	0.513
students with disabilities	5814	0.508
inequity	5754	0.503
financial stability	5742	0.502
social mobility	5736	0.501
asylum seekers	5520	0.482
remittance	5383	0.470
international migration	5356	0.468
racial and ethnic	5309	0.464
economic inequality	5249	0.458
migration policy	5244	0.458
financial crises	5205	0.455
social determinants of health	5187	0.453
social justice.	5156	0.450
access to healthcare	5133	0.448
economic inequalities	5114	0.447
medicare and medicaid	5086	0.444
remittances	4555	0.398
care disparities	4325	0.378
social housing	4284	0.374
health cover	4280	0.374
health coverage	4261	0.372
minimum wage	4233	0.370
racial discrimination	4158	0.363
uninsured	4072	0.356

Term	Number of publications in set	ratio
public housing	4014	0.351
health inequities	3861	0.337
universal health coverage	3854	0.337
economic disparities	3768	0.329
health care access	3765	0.329
gender equity	3762	0.329
migration policies	3597	0.314
affordable housing	3559	0.311
social stratification	3488	0.305
migration flow	3405	0.297
affirmative action	3349	0.293
centers for medicare and medicaid	3345	0.292
healthcare access	3224	0.282
inequalities in health	3190	0.279
immigration policy	3169	0.277
centers for medicare and medicaid services	3137	0.274
equal opportunities	3109	0.272
gender inequalities	3098	0.271
gender discrimination	3072	0.268
social equity	3042	0.266
socioeconomic inequalities	3011	0.263
disparities in health	2977	0.260
migration flows	2956	0.258
laundering	2869	0.251
affordable care	2801	0.245
money laundering	2772	0.242
age gap	2768	0.242
affordable care act	2751	0.240
wage gap	2552	0.223
racial/ethnic disparities	2547	0.222
gender disparities	2473	0.216
health inequality	2463	0.215
socioeconomic disparities	2440	0.213
crisis period	2405	0.210
forced migration	2393	0.209
financial regulation	2389	0.209
residential segregation	2315	0.202
disparities health	2306	0.201

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

SDG 11 – Sustainable Cities and Communities

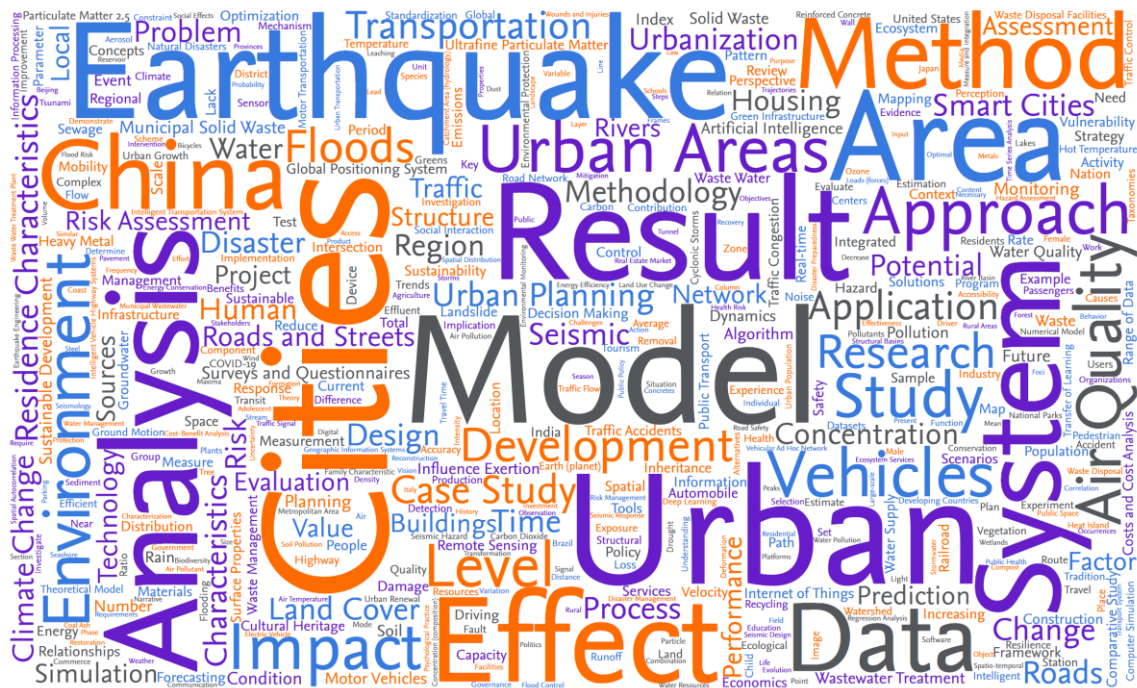


Table 18 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-11)

Term	Number of publications in set	ratio
intelligent transport	23221	1.448
urban land	19508	1.216
art cities	19121	1.192
smart cities	19095	1.190
art city	18688	1.165
mart city	18644	1.162
smart city	18643	1.162
intelligent transportation	18509	1.154
intelligent transportation system	15544	0.969
road safety	13278	0.828
traffic safe	13140	0.819
traffic safety	13111	0.817
municipal wastewater	12337	0.769
public transportation	11332	0.706
flood risk	11020	0.687
urban lands	10095	0.629
intelligent transportation systems	9956	0.621
urban traffic	9709	0.605
urban landscape	9652	0.602
heat island	9553	0.596

Term	Number of publications in set	ratio
sustainable urban	9301	0.580
urban heat	9206	0.574
urban water	8975	0.559
green space	8793	0.548
urban heat island	8533	0.532
heritage site	8346	0.520
urban green	8310	0.518
urban transport	8143	0.508
housing market	8121	0.506
urban road	7917	0.494
urban ai	7812	0.487
urban air	7789	0.486
solid wastes	7603	0.474
ad networks	7599	0.474
road networks	7583	0.473
rail transit	7026	0.438
world heritage	7008	0.437
urban design	6920	0.431
rapid urbanization	6774	0.422
urban growth	6764	0.422
traffic signal	6754	0.421
municipal solid waste (msw)	6544	0.408
disaster risk	6385	0.398
earthquake engineering	6383	0.398
solid waste management	5946	0.371
disaster prevention	5891	0.367
urban form	5600	0.349
signalize	5505	0.343
signalized	5492	0.342
traffic noise	5488	0.342
urban waste	5479	0.342
urban expansion	5453	0.340
urban rail	5331	0.332
municipal wastewater treatment	5327	0.332
green spaces	5245	0.327
smart cities.	5020	0.313
seismic risk	4887	0.305
public transit	4850	0.302
intelligent transport system	4836	0.301
urban mobility	4797	0.299
signalized intersection	4739	0.295
urban forest	4651	0.290

Term	Number of publications in set	ratio
water effluent	4633	0.289
gentrification	4534	0.283
heritage sites	4520	0.282
wastewater effluent	4520	0.282
urban sprawl	4507	0.281
post-earthquake	4327	0.270
green infrastructure	4286	0.267
urban transportation	4168	0.260
urban planner	4141	0.258
urban infrastructure	4112	0.256
urban regeneration	4057	0.253
historical building	4050	0.252
urban planners	3967	0.247
urban planning.	3948	0.246
world heritage site	3945	0.246
the smart city	3902	0.243
urban park	3819	0.238
social housing	3778	0.236
urban sustainability	3686	0.230
waste collection	3672	0.229
historic building	3662	0.228
urban ecosystem	3658	0.228
peak ground acceleration	3622	0.226
urban green space	3613	0.225
urban landscapes	3604	0.225
municipal wastewater treatment plant	3594	0.224
signalized intersections	3593	0.224
flood hazard	3592	0.224
public housing	3571	0.223
urban land use	3566	0.222
urban rail transit	3485	0.217
urban policy	3480	0.217
seismic damage	3469	0.216
urban governance	3458	0.216
municipal sewage	3449	0.215
housing policy	3407	0.212
earthquake damage	3405	0.212
traffic emission	3402	0.212

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

8.12. SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

SDG 12 – Responsible Consumption and Production



Figure 37 Wordcloud SDG12

Table 19 Frequently occurring terms within the development dataset for Elsevier 2025 Mapping (SDG-12)

Term	Number of publications in set	ratio
cycle assessment	31309	2.818
life cycle assessment	27819	2.503
forest management	25330	2.279
municipal solid waste	20172	1.815
composting	15709	1.414
(lca)	15674	1.411
sustainable agriculture	12981	1.168
life cycle assessment (lca)	12648	1.138
sustainable product	10869	0.978
tourism development	10580	0.952
waste treatment	9618	0.866
sustainable production	9585	0.863
hazardous waste	9005	0.810
environmental education	7665	0.690
green building	6763	0.609
cycling process	6608	0.595
municipal solid waste (msw)	6543	0.589
landfill leachate	6536	0.588
recycling process	6534	0.588
natural resource management	6462	0.582

Term	Number of publications in set	ratio
sustainability assessment	6258	0.563
waste recycling	6223	0.560
solid waste management	5951	0.536
sustainable tourism	5876	0.529
ecotour	5554	0.500
ecotourism	5445	0.490
waste management.	5384	0.485
sustainable forest	5307	0.478
waste incineration	5013	0.451
sustainable agricultural	4978	0.448
life cycle analysis	4654	0.419
waste generation	4586	0.413
micom	4458	0.401
vermicompost	4448	0.400
sustainable building	4429	0.399
food preservation	4418	0.398
cleaner product	4089	0.368
cleaner production	4069	0.366
sustainable construction	4056	0.365
impact categories	4024	0.362
energy building	4008	0.361
sustainable forest management	3846	0.346
e-waste	3835	0.345
stakeholder engagement	3768	0.339
composting process	3696	0.333
waste management system	3582	0.322
sustainable supply	3576	0.322
tourism destination	3574	0.322
life-cycle assessment	3554	0.320
sustainable consumption	3553	0.320
sustainable agriculture.	3550	0.319
green roof	3531	0.318
waste land	3389	0.305
sustainable manufacturing	3329	0.300
sustainable supply chain	3320	0.299
waste landfill	3309	0.298
green supply	3303	0.297
green supply chain	3279	0.295
waste generated	3266	0.294
industrial ecology	3225	0.290
waste incinerator	3137	0.282
environmental management system	3113	0.280

Term	Number of publications in set	ratio
landfilling	3113	0.280
construction and demolition	3101	0.279
landfill site	3063	0.276
education for sustainable	3050	0.274
demolition waste	3045	0.274
recycling waste	3040	0.274
sustainability report	3014	0.271
corporate sustainability	3001	0.270
resource efficiency	2984	0.269
tourism sector	2965	0.267
waste-to-energy	2959	0.266
education for sustainable development	2940	0.265
triple bottom line	2873	0.259
mental attitude	2849	0.256
environmental attitude	2837	0.255
cycling system	2758	0.248
recycling system	2751	0.248
food preservative	2722	0.245
green product	2694	0.242
life cycle impact	2689	0.242
green roofs	2688	0.242
waste collection	2666	0.240
construction and demolition waste	2631	0.237
green buildings	2624	0.236
ecological footprint	2588	0.233
environmental burden	2585	0.233
cycling rate	2548	0.229
rural tourism	2544	0.229
recycling rate	2536	0.228
cultural sustainability	2518	0.227
iso 9001	2517	0.227
composts	2490	0.224
conservation agriculture	2457	0.221
tourism management	2455	0.221
electronic waste	2440	0.220
landfill gas	2411	0.217
waste process	2388	0.215
life cycle inventory	2348	0.211

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

SDG 13 – Climate Action



Term	Number of publications in set	ratio
global climate change	21297	1.371
co2 cap	19842	1.277
co2 captur	19579	1.261
co2 capture	19417	1.250
hg emission	17038	1.097
ghg emission	16961	1.092
carbon footprint	16009	1.031
carbon cap	15667	1.009
carbon capture	15162	0.976
hg emissions	14823	0.954
effects of climate	14792	0.952
ghg emissions	14765	0.951
o2 reduction	14674	0.945
co2 reduction	14594	0.940
greenhouse gas (ghg)	14514	0.934
change impact	14130	0.910
climate change impact	13436	0.865
carbon dioxide emission	13379	0.861
effects of climate change	13132	0.845
climate warming	12266	0.790

Term	Number of publications in set	ratio
greenhouse gas (ghg) emission	11439	0.736
impacts of climate change	11286	0.727
co2 emissions.	10657	0.686
change impacts	10552	0.679
ipcc	10263	0.661
carbon dioxide emissions	10213	0.658
climate change mitigation	10194	0.656
greenhouse gas (ghg) emissions	10048	0.647
climate change impacts	9999	0.644
the climate change	9717	0.626
impact of climate	9203	0.593
reduction of co2	9016	0.580
capture and storage	8951	0.576
change adaptation	8799	0.567
climate change adaptation	8610	0.554
change scenario	8575	0.552
impact of climate change	8215	0.529
climate change scenario	7709	0.496
warming potential	7687	0.495
global warming potential	7466	0.481
climate policy	7004	0.451
change scenarios	6964	0.448
emissions reduction	6940	0.447
future climate change	6845	0.441
carbon capture and storage	6829	0.440
o2 storage	6799	0.438
co2 storage	6785	0.437
co2 injection	6236	0.401
climate change scenarios	6231	0.401
methane emission	5944	0.383
global climate change.	5897	0.380
co2e	5879	0.379
intergovernmental panel on climate change	5724	0.369
adaptation strategies	5684	0.366
co2 conversion	5611	0.361
n2o emission	5592	0.360
co2 adsorption	5507	0.355
change climate	5418	0.349
climate scenario	5305	0.342
kyoto protocol	5262	0.339
response to climate	5021	0.323

Term	Number of publications in set	ratio
paris agreement	5011	0.323
ch4 emission	4857	0.313
n2o emissions	4529	0.292
storage (ccs)	4526	0.291
ghgs	4452	0.287
co2 sequestration	4436	0.286
carbon tax	4314	0.278
gwp	4311	0.278
climate scenarios	4303	0.277
methane emissions	4269	0.275
zero emission	4181	0.269
adaptation to climate	4145	0.267
carbon dioxide (co2) emission	4075	0.262
emission scenario	4037	0.260
climate impact	4000	0.258
the kyoto protocol	3999	0.257
the paris agreement	3925	0.253
emission reductions	3919	0.252
response to climate change	3915	0.252
adaptation to climate change	3868	0.249
conversion of co2	3865	0.249
o2 separation	3705	0.239
anthropogenic climate change	3704	0.238
ch4 emissions	3693	0.238
co2r	3690	0.238
co2 separation	3683	0.237
representative concentration pathway	3681	0.237
carbon reduction	3652	0.235
emissions trading	3619	0.233
co 2 emission	3617	0.233
reduce co2 emissions	3538	0.228
post-combustion	3536	0.228
oxide cap	3535	0.228
dry reforming	3519	0.227
effect of climate	3516	0.226
carbon dioxide capture	3422	0.220
reforming of methane	3364	0.217
climate adaptation	3360	0.216
carbon capture and storage (ccs)	3355	0.216

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

SDG 14 – Life Below Water



Term	Number of publications in set	ratio
oil spill	17408	1.914
blooms	16509	1.815
marine ecosystem	11137	1.225
algal bloom	10881	1.196
aquaculture.	9668	1.063
spills	9060	0.996
farmed	8964	0.986
algal blooms	8235	0.906
marine ecosystems	7729	0.850
oil spills	7700	0.847
marine protected area	7494	0.824
microplastic	7460	0.820
phosphorus removal	7384	0.812
fish farm	6790	0.747
microplastics	6790	0.747
ocean acidification	6079	0.668
harmful algal	5639	0.620
coastal ecosystem	5628	0.619
harmful algal bloom	5512	0.606
fisheries management	5318	0.585

Term	Number of publications in set	ratio
atlantic salmon	5309	0.584
marine protected areas	5305	0.583
coastal environment	4996	0.549
fish meal	4943	0.544
oysters	4670	0.514
culture industry	4521	0.497
niloticus	4478	0.492
coastal management	4403	0.484
harmful algal blooms	4318	0.475
coastal ecosystems	4263	0.469
oreochromis niloticus	4257	0.468
aquaculture industry	4202	0.462
aquaculture system	3952	0.435
plankton bloom	3710	0.408
marine resource	3664	0.403
annam	3597	0.396
vannamei	3577	0.393
nile tilapia	3513	0.386
phytoplankton bloom	3481	0.383
crassostrea	3476	0.382
penaeus vannamei	3445	0.379
fishers	3421	0.376
marine species	3419	0.376
fish farming	3130	0.344
plastic pollution	3115	0.343
mariculture	3100	0.341
marine resources	2980	0.328
litopenaeus	2963	0.326
marine pollution	2932	0.322
fishmeal	2909	0.320
fish feed	2863	0.315
ecosystem-based	2846	0.313
fingerling	2772	0.305
coastal wetland	2743	0.302
overfishing	2739	0.301
litopenaeus vanname	2735	0.301
litopenaeus vannamei	2735	0.301
marine reserve	2672	0.294
culture production	2500	0.275
coastal environments	2466	0.271
coastal communities	2454	0.270
aquaculture systems	2406	0.265

Term	Number of publications in set	ratio
fingerlings	2352	0.259
coastal marine	2341	0.257
shrimp farm	2316	0.255
fish farms	2312	0.254
coastal protection	2306	0.254
aquaculture production	2304	0.253
alexandrium	2287	0.251
land restoration	2241	0.246
coastal lagoon	2201	0.242
coastal zones	2172	0.239
tilapia (oreochromis niloticus)	2162	0.238
sea bass	2161	0.238
farmed fish	2149	0.236
fish production	2142	0.236
fish growth	2138	0.235
protein efficiency	2131	0.234
broodstock	2107	0.232
zone management	2098	0.231
coastal erosion	2094	0.230
marine oil	2094	0.230
deepwater horizon	2084	0.229
marine protected areas (mpas)	2066	0.227
coastal zone management	2051	0.226
plankton blooms	2045	0.225
marine conservation	2017	0.222
fish stocks	1994	0.219
culture pond	1988	0.219
coastal wetlands	1984	0.218
feed utilization	1975	0.217
sea bream	1971	0.217
wetland restoration	1949	0.214
head sea	1939	0.213
marine spa	1930	0.212
crassostrea gigas	1927	0.212
dicentra	1925	0.212
biological phosphorus removal	1911	0.210
sparus	1911	0.210
marine biodiversity	1899	0.209

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

SDG 15 – Life on Land



Term	Number of publications in set	ratio
forest management	25355	1.967
endangered specie	19450	1.509
endangered species	19442	1.508
diversity conservation	17484	1.356
biodiversity conservation	17076	1.325
phytoremediation	16096	1.249
ecological restoration	10725	0.832
threatened species	10369	0.804
conservation status	10199	0.791
iucn	10058	0.780
predator-prey	9457	0.734
conservation plan	8880	0.689
afforestation	8787	0.682
alien species	8328	0.646
reforestation	8161	0.633
invasive plant	8013	0.622
conservation effort	7969	0.618
conservation efforts	7628	0.592
critically endangered	7571	0.587
habitat loss	7294	0.566

Term	Number of publications in set	ratio
biological invasion	7225	0.561
nature conservation	7154	0.555
conservation planning	6596	0.512
oil conservation	6495	0.504
soil conservation	6492	0.504
conservation strategies	6393	0.496
conservation and management	5476	0.425
introduced species	5382	0.418
exotic specie	5358	0.416
exotic species	5355	0.415
sustainable forest	5320	0.413
ecosystem management	5211	0.404
forest plan	5128	0.398
habitat fragment	5075	0.394
biological invasions	5060	0.393
conservation management	5023	0.390
habitat fragmentation	4884	0.379
natural regeneration	4754	0.369
revegetation	4735	0.367
iucn red list	4643	0.360
sustainable land	4608	0.358
prey interaction	4557	0.354
species conservation	4445	0.345
invasive plants	4419	0.343
invasive alien	4387	0.340
restoration project	4364	0.339
non-native species	4310	0.334
life management	4282	0.332
wildlife management	4259	0.330
biodiversity loss	4242	0.329
environmental conservation	4208	0.326
management and conservation	4183	0.325
conservation action	4168	0.323
land restoration	4127	0.320
forest plant	4108	0.319
forest fragment	3999	0.310
conservation value	3980	0.309
conservation area	3978	0.309
prey model	3964	0.308
conservation biology	3955	0.307
phytoextract	3954	0.307
endangered species.	3910	0.303

Term	Number of publications in set	ratio
extinction risk	3905	0.303
habitat suitability	3889	0.302
soil and water conservation	3884	0.301
conservation concern	3881	0.301
phytoextraction	3865	0.300
sustainable forest management	3846	0.298
population declines	3837	0.298
invasive species.	3784	0.294
poaching	3669	0.285
ant invasion	3641	0.282
protected areas.	3595	0.279
forest conservation	3560	0.276
biodiversity conservation.	3512	0.272
plant invasion	3475	0.270
prey interactions	3448	0.268
forest restoration	3384	0.263
predator-prey interaction	3371	0.262
forest plantation	3336	0.259
forest lands	3332	0.259
vegetation restoration	3323	0.258
forest resources	3314	0.257
wildlife conservation	3310	0.257
effective conservation	3308	0.257
native plants	3285	0.255
troglydyte	3273	0.254
native range	3261	0.253
troglydytes	3258	0.253
conservation practice	3236	0.251
panthera	3235	0.251
restoration projects	3235	0.251
wolves	3186	0.247
contingent valuation	3172	0.246
alien plant	3163	0.245
pan troglodytes	3139	0.244
native forest	3108	0.241
local extinction	3052	0.237
predator-prey model	3047	0.236
forest regeneration	3021	0.234

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

SDG 16 – Peace, Justice and Strong Institutions



Term	Number of publications in set	ratio
sexual abuse	20875	1.668
domestic violence	17413	1.391
intimate partner	16653	1.331
partner violence	16042	1.282
intimate partner violence	14855	1.187
e-gov	14703	1.175
child abuse	14225	1.137
e-government	12879	1.029
e-government	12879	1.029
maltreatment	12637	1.010
violence against	11743	0.938
homicide	11730	0.937
community engagement	10666	0.852
participatory research	10586	0.846
sexual assault	10510	0.840
rule of law	10508	0.840
sexual violence	10246	0.819
public participation	9665	0.772
human rights.	9547	0.763
child welfare	9370	0.749

Term	Number of publications in set	ratio
armed conflict	9258	0.740
against women	8940	0.714
community participation	8817	0.705
perpetrators	8446	0.675
physical abuse	8415	0.672
political participation	8406	0.672
civil right	8186	0.654
civil rights	8077	0.645
intimate partner violence (ipv)	7756	0.620
violence against women	7505	0.600
child protection	7238	0.578
child maltreatment	6993	0.559
the rule of law	6988	0.558
child sex	6606	0.528
stakeholder engagement	6540	0.523
fundamental right	6537	0.522
participatory approach	6479	0.518
child sexual	6222	0.497
civic engagement	5889	0.471
public engagement	5752	0.460
the human rights	5687	0.454
child sexual abuse	5567	0.445
sexual harassment	5284	0.422
fundamental rights	5199	0.415
citizen participation	5166	0.413
physical violence	5100	0.408
international human rights	5092	0.407
perpetration	5077	0.406
community-based participatory	5013	0.401
abuse and neglect	4844	0.387
violent crime	4793	0.383
community involvement	4734	0.378
community-based participatory research	4710	0.376
cyberbully	4560	0.364
cyberbullying	4552	0.364
political violence	4540	0.363
war on terror	4455	0.356
rights violation	4230	0.338
human rights law	4202	0.336
victimization.	4144	0.331
european court	4107	0.328

Term	Number of publications in set	ratio
court of human rights	4001	0.320
sex offender	3929	0.314
emotional abuse	3903	0.312
violence prevention	3877	0.310
human rights violation	3816	0.305
homicides	3814	0.305
rights violations	3752	0.300
family violence	3726	0.298
personal violence	3543	0.283
childhood sexual abuse	3526	0.282
bribe	3519	0.281
physical aggression	3517	0.281
gender-based violence	3513	0.281
interpersonal violence	3463	0.277
public involvement	3462	0.277
european court of human rights	3454	0.276
participatory process	3437	0.275
political engagement	3429	0.274
human rights violations	3395	0.271
liberti	3324	0.266
stakeholder involvement	3313	0.265
childhood abuse	3301	0.264
liberties	3289	0.263
government service	3273	0.262
sex offenders	3243	0.259
individual right	3237	0.259
political right	3198	0.256
childhood maltreatment	3113	0.249
the european court of human rights	3091	0.247
human traffic	3088	0.247
human trafficking	3068	0.245
freedom of expression	3010	0.241
organized crime	2955	0.236
transitional justice	2915	0.233
individual rights	2884	0.230
government services	2829	0.226
armed conflicts	2825	0.226
deliberative democracy	2720	0.217
political rights	2699	0.216

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

SDG 17 – Partnerships for the Goals



Term	Number of publications in set	ratio
monetary policy	18866	2.145
development goal	15780	1.794
development goals	14061	1.599
sustainable development goal	13485	1.533
sustainable development goals	12007	1.365
direct investment	11264	1.281
national cooperation	11146	1.267
international cooperation	11046	1.256
foreign direct	10990	1.250
foreign direct invest	10960	1.246
foreign direct investment	10938	1.244
national development	10472	1.191
international development	9431	1.072
sdg	8492	0.966
fiscal policy	7978	0.907
and sustainable development	6702	0.762
central bank	6483	0.737
private partner	6434	0.732
sdgs	6418	0.730
private partnership	6387	0.726

Term	Number of publications in set	ratio
public-private	5054	0.575
free trade	4984	0.567
world trade	4933	0.561
foreign direct investment (fdi)	4639	0.527
the sustainable development goals	4564	0.519
sustainable development goals (sdgs)	4544	0.517
formal sector	4538	0.516
public-private partnership	4502	0.512
foreign investment	4460	0.507
trade agreement	4413	0.502
informal sector	4367	0.497
tax system	3877	0.441
sustainable urban	3858	0.439
the wto	3854	0.438
belt and road	3798	0.432
trade organization	3795	0.431
tax policy	3771	0.429
world trade organization	3718	0.423
private partnerships	3661	0.416
tax rate	3589	0.408
foreign aid	3532	0.402
road initiative	3510	0.399
belt and road initiative	3345	0.380
income tax	3157	0.359
omic integration	2986	0.340
economic integration	2985	0.339
development assistance	2911	0.331
launder	2891	0.329
laundering	2880	0.327
monetary policy.	2860	0.325
comparative advantage	2823	0.321
the world trade organization	2796	0.318
money laundering	2769	0.315
trade agreements	2726	0.310
formal economy	2621	0.298
foreign trade	2608	0.297
development age	2605	0.296
public-private partnerships	2600	0.296
free trade agreement	2571	0.292
corporate tax	2543	0.289
the belt and road	2540	0.289
informal economy	2539	0.289

Term	Number of publications in set	ratio
the informal sector	2524	0.287
sustainability assessment	2518	0.286
economic cooperation	2515	0.286
value chains	2508	0.285
regional integration	2490	0.283
tax evasion	2463	0.280
the central bank	2457	0.279
trade liberalization	2431	0.276
sustainable economic	2420	0.275
fiscal policies	2381	0.271
trade policy	2368	0.269
sustainable transport	2363	0.269
trade openness	2349	0.267
market access	2328	0.265
tax revenue	2246	0.255
the sdgs	2238	0.254
the belt and road initiative	2223	0.253
environmental sustainability.	2182	0.248
global value	2179	0.248
central banks	2156	0.245
millennium development	2125	0.242
tax rates	2119	0.241
millennium development goal	2112	0.240
global value chain	2105	0.239
unfc	2066	0.235
fccc	2056	0.234
unfcc	2054	0.234
unfccc	2041	0.232
world trade organization (wto)	1999	0.227
environmental policies	1996	0.227
sustainable land	1993	0.227
sustainable forest	1974	0.224
development policies	1909	0.217
global trade	1904	0.216
inflation target	1900	0.216
public debt	1899	0.216
monetary policies	1890	0.215
foreign investor	1881	0.214

Note: The 'ratio' represents the proportion of specific research output relative to the total number of publications within the Elsevier 2025 SDGs Mapping development dataset.

9. References

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