



**An
Phríomh-Oifig
Staidrimh**

Central
Statistics
Office

Ireland's innovative approach to Monitoring the Sustainable Development Goals (SDGs) through geospatial visualisation

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Co-chair of the WHO/UN Technical Advisory Group on COVID-19 Mortality Assessment

Role of CSO

Focal Point for SDG Indicators

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Coordinate requests for SDG data from UN Agencies. • Identify, management and presentations of the SDG indicator data. | <ul style="list-style-type: none"> • Employ UNECE's GSBPM • Developed a National SDG Indicators Roadmap • Liaison with Govt. Departments and Agencies |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Governance

Weekly	CSO, Ordnance Survey Ireland (OSi), Dept of the Environment Climate & Communications (DECC) and Esri Ireland	<ul style="list-style-type: none"> • SDG Data Hub • Data uploads • Story Maps • VNR 	<ul style="list-style-type: none"> • Government Initiatives • SDG National Champions • Civil Society • Academia
Quarterly	Data Governance Board – All Govt Departments and Agencies are members	<ul style="list-style-type: none"> • SDG presentations • Metadata • Business glossaries 	<ul style="list-style-type: none"> • Lifecycle management • Data quality • GSBPM
Annual	SDG Civil Service Senior Official Group	<ul style="list-style-type: none"> • Government reports on progress towards SDGs • National Policy aspects of individual Goals 	<ul style="list-style-type: none"> • Topics for Story Maps • VNR



Foundations of Ireland's approach

Generic Statistical Business Process Model

GSBPM

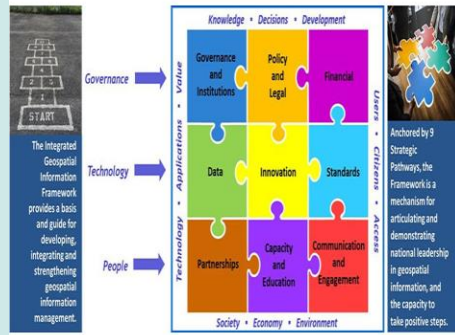
Quality Management / Metadata Management							
1. Specify needs	2. Preparation and development of statistical methodologies	3. Build necessary instruments for enforcement	4. Data collection	5. Data processing	6. Analyse	7. Dissemination	8. Evaluate
1.1 Determine needs for information and resources/results	2.1 Definition and development of methodology for collecting data and conducting surveys	3.1 Build data collection instruments	4.1 Selection of data representative	5.1 Integration of data collection	6.1 Statistical analysis of results	7.1 Design and production of dissemination products	8.1 Gather evaluation inputs
1.2 Confirm & confirm needs	2.2 Define a framework and methodology for the data collection	3.2 Build instruments for data collection	4.2 Preparation of data collection	5.2 Control, editing and data correction	6.2 Quality control results	7.2 Management of statistical dissemination products	8.2 Conduct evaluation
1.3 Develop robust objective, measurable and testing procedures	2.3 Development of methodology for data processing	3.3 Configure software	4.3 Primary data collection	5.3 Imputation and weighting	6.3 Detailed analysis and integration of data processing	7.3 Prepare dissemination products	8.3 Agree action plan
	2.4 Testing instruments for data collection and data processing	3.4 Testing instruments for data collection and data processing	4.4 Overseeing data from administrative and other secondary sources	5.4 Production of derived variables	6.4 Protection of confidential data	7.4 Manage user support	
	3.5 Test statistical business process	4.5 Drawing of data collection	5.5 Calculating the aggregates	6.5 Calculation of final data files	7.5		
				5.7 Production and updating of metadata and database			

The Global Statistical Geospatial Framework

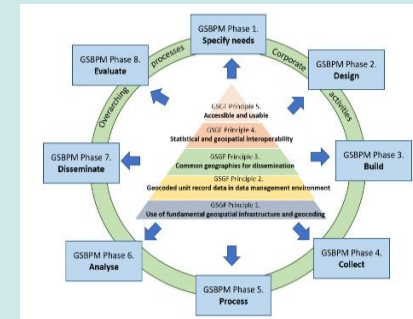
GSGF



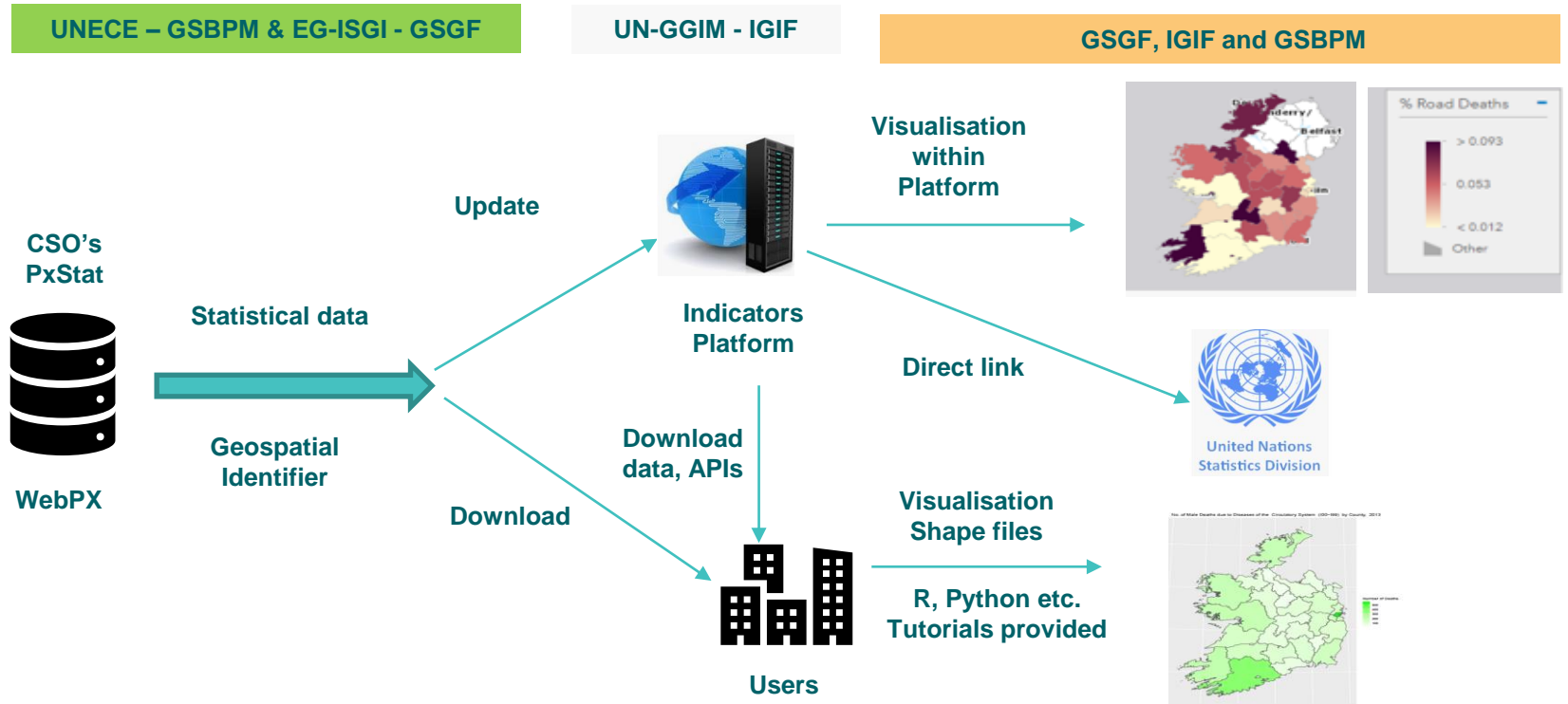
UN-GGIM's Integrated Geospatial Information Framework - IGIF



GSBPM and GSGF Principles



Ireland's SDG reporting ecosystem



Ireland's SDG Data Hub

SDG Data Hub

<http://irelandsdg.geohive.ie/>

- Government Portal for all SDGs (UN, EU, National, OECD)
- Provide Data
- OSi – manages technical issues – uploads data
- DECC – responsibility for content

Geospatial visualisation

Story maps as a new communication channel

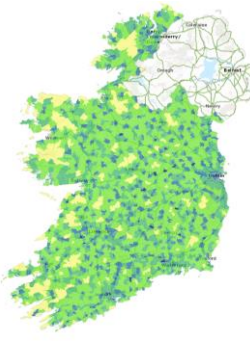


Welcome to Ireland's Sustainable Development Goals (SDGs) data hub.

This is a collaboration platform for reporting on progress towards the goals and sharing information on related initiatives.


Ireland's progress against each goal is measured using a set of United Nations (UN) global and European Union (EU) agreed targets and indicators.

From this home page, you can access information on specific goals, view our video and sign up to receive updates.

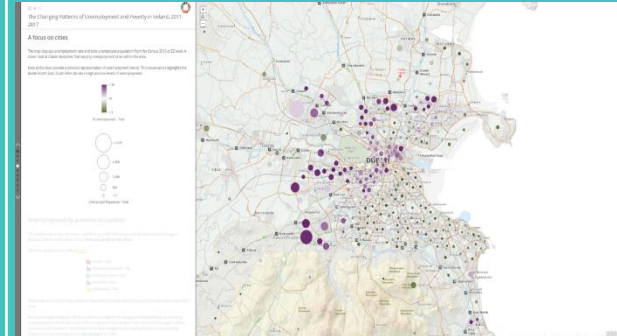
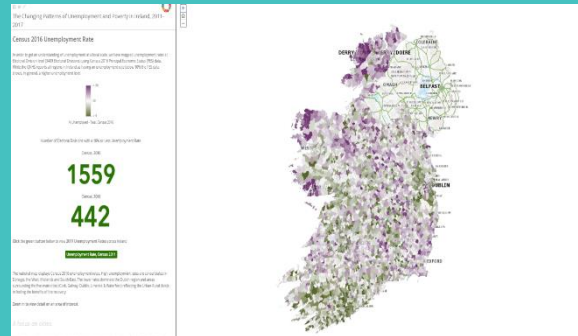


Story Maps

The Changing Patterns of Unemployment and Poverty in Ireland, 2011-2017



This Story Map illustrates changes in Ireland in relation to unemployment and poverty throughout the last decade. The Story Map has been developed to support efforts in reporting Ireland's status in relation to achieving United Nations (UN) Sustainable Development Goals.



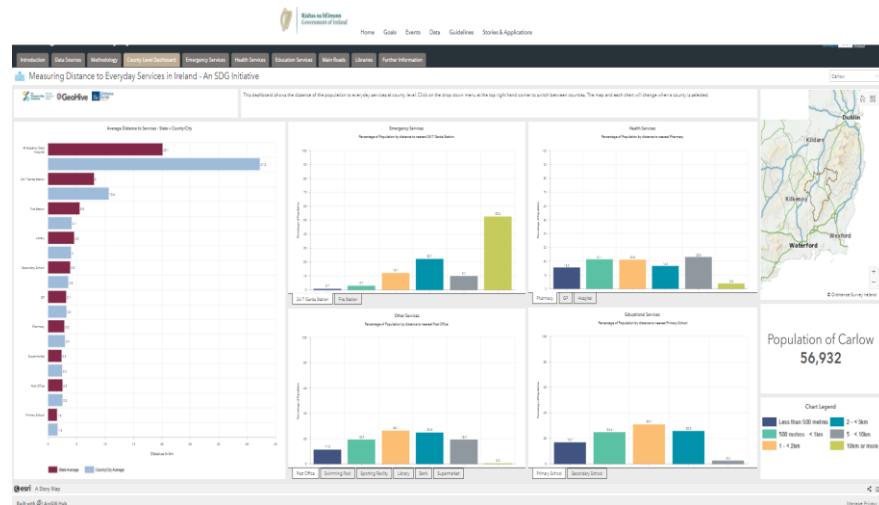
Network Analysis - Measuring Distance to Everyday Services - 2019

Census 2016 (Origin)

- 98% of dwellings linked to address database prior to census
- 2% digitised by census staff
- 2,070,256 dwellings on final census dataset

OSi's PRIME 2 (Road network)

- Geographic Data Files level 2 (GDF2) from PRIME 2 database
- Over 300,000 segments
- Each segment is seamless and continuous, no broken lines or edges
- Generate network dataset using ArcGIS





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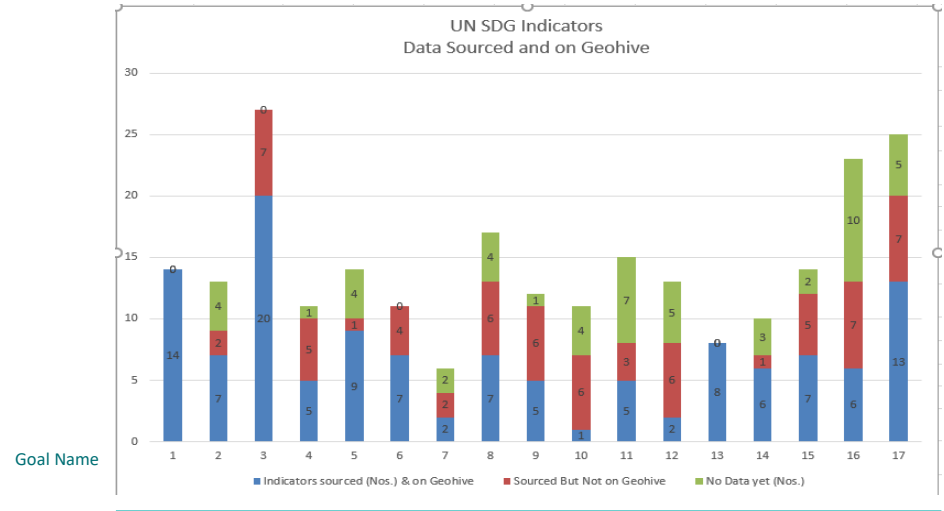
SDG - Hub



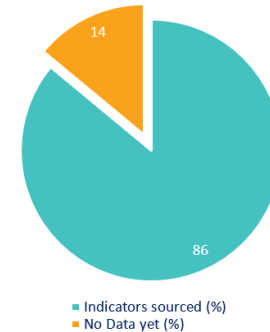
Dashboard – No. Indicators sourced

Goal	Total No. of SDG Indicators	Indicators sourced (Nos.)	No Data yet (Nos.)
Goal 1	14	14	0
Goal 2	13	10	3
Goal 3	27	27	0
Goal 4	11	10	1
Goal 5	14	13	1
Goal 6	11	11	0
Goal 7	6	5	1
Goal 8	17	16	1
Goal 9	12	11	1
Goal 10	11	8	3
Goal 11	15	10	5
Goal 12	13	11	2
Goal 13	8	8	0
Goal 14	10	8	2
Goal 15	14	14	0
Goal 16	23	14	9
Goal 17	25	21	4
Total	244	211	33

Status - 2019



SDG Indicators Sourced



Publications - UN SDG Goals

<https://www.cso.ie/en/statistics/unsustainabledevelopmentgoals/>

> Goals 1 to 15 – Published
> Goals 16 & 17 progressing



Statistical Publications

- > UN SDG's Goal 1 - No Poverty
- > UN SDG's Goal 2 - Zero Hunger
- > UN SDG's Goal 3 - Good Health and Well-Being
- > UN SDG's Goal 4 - Quality Education
- > UN SDG's Goal 5 - Gender Equality
- > UN SDG's Goal 6 - Clean Water and Sanitation
- > UN SDG's Goal 7 - Affordable and Clean Energy
- > UN SDGs Goal 8 - Decent Work and Economic Growth -2021
- > UN SDGs Goal 9 - Industry Innovation and Infrastructure 2021
- > UN SDG's Goal 10 - Reduced Inequalities 2021
- > UN SDG's Goal 11 Sustainable Cities and Communities 2021
- > UN SDG's Goal 12 Responsible Consumption and Production 2021
- > UN SDG's Goal 13 Climate Action 2021
- > UN SDG's Goal 14 Life Below Water 2021
- > UN SDG's Goal 15 Life on Land 2022

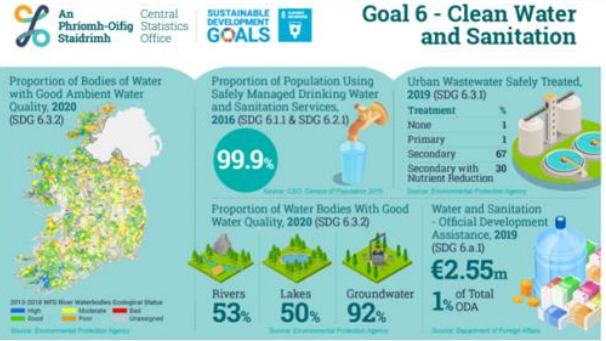
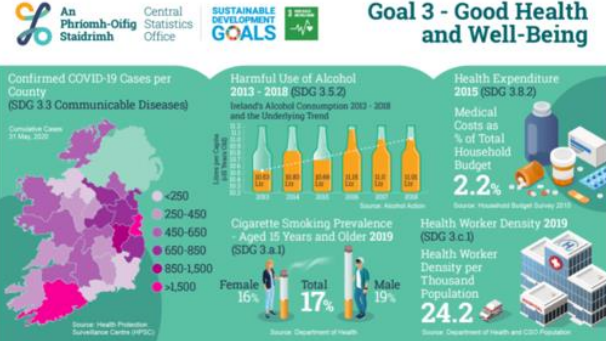
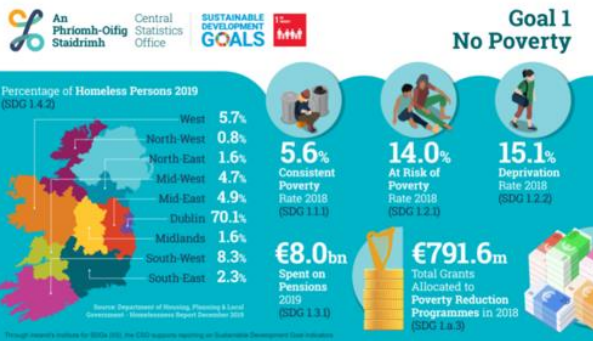
Related Content

- > A Profile of Ireland's Border Population 2016
- > Measuring Distance to Everyday Services in Ireland
- > Regional SDGs Ireland 2017
- > Mapping a Table of Data with Esri Shapefiles in R

Related Links

- > Ireland's SDG Data Hub

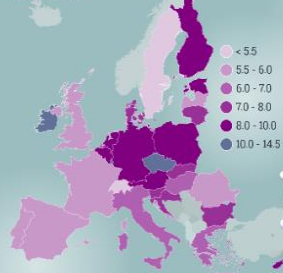
SDG Publications – Goals 1 to 15 (Feb 2020 to Dec 2022)



Goal 13 - Climate Action

Goal 14 - Life Below Water

EU Greenhouse Gas Emissions (tonnes CO₂ equivalent) per Capita, 2020 (SDG 13.2.2)



Source: European Environment Agency

UN Framework Convention on Climate Change, 2020 (SDG 13.a.1)

Ireland's Contribution **€89.2m**

Source: Eurostat

Greenhouse Gas Emissions Share by Sector, 2021 (SDG 13.2.2)



Source: Environmental Protection Agency

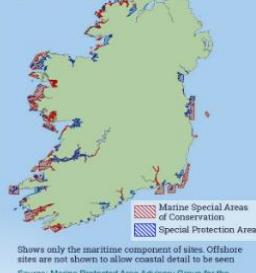
Overseas Development Aid, 2021 (SDG 13.b.1)

€3.5m

assisting least developed countries adapt to climate change impacts

Source: Department of Foreign Affairs

Coverage of Protected Areas in Relation to Marine Areas, 2020 (SDG 14.5.1)



Shows only the maritime component of sites. Offshore sites are not shown to allow coastal detail to be seen. Source: Marine Protected Area Advisory Group for the Department of Housing, Local Government and Heritage, 2020

Fish Stocks¹ Fished at or Below MSY² (SDG 14.4.1)

47% in 2020
34% in 2013



¹ Stocks of interest to Ireland
² Maximum Sustainable Yield
Source: Marine Institute Stockbook

Coverage of Protected Areas in Relation to Marine Areas, 2020 (SDG 14.5.1)

Marine protected area network **10,420km²** or **2.13%** of total maritime area of **488,762km²**



Source: Marine Protected Area Advisory Group for the Department of Housing, Local Government and Heritage, 2020

European Maritime and Fisheries Fund, 2014-2020 (SDG 14.b.1)



European Union Funding **€147.6 million**

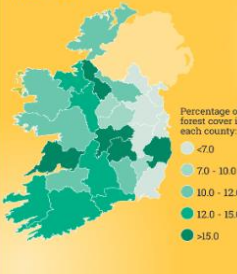
Irish Government Funding **€91.6 million**

Total Funding **€239.2 million**

Source: Department of Agriculture, Food and the Marine. Future funding of €258.4 million is expected under the EMFF² 2023-2027

Goal 15 - Life on Land

Forest Cover by County, 2022 (SDG 15.1.1)



Source: Department of Agriculture, Food and the Marine

Ireland's Forest Area, 2022 (SDG 15.1.1)

808,848 hectares
11.6% of land area

Source: Department of Agriculture, Food and the Marine

Ireland's Total Official Development Assistance for Biodiversity, 2020 (SDG 15.a.1)

\$47.4m*

*Constant 2020 USD
Source: United Nations Statistics Division

Special Protection Areas (SPAs), 2022 (SDG 15.1.2)

Ireland's SPA Network (Marine and Terrestrial Habitats) **597,000** hectares

Source: National Parks and Wildlife Service

Land Cover Type (%), 2018 (SDG 15.3.1)



Agriculture 2000: 2018
67.2 | **67.6**

Wetlands 2000: 2018
16.9 | **14.9**

Source: Corine data produced by the Environmental Protection Agency for the European Environment Agency



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Thank You