Eireplan

Evaluating the Feasibility of Using Planning Data to Monitor SDG Implementation in Ireland

Evidence from a twelve-month analysis of the Eireplan Precedents Database

EXPLORATORY RESEARCH REPORT
April 2026

Abstract

Background

Reliable, timely and locally disaggregated evidence on the implementation of the United Nations Sustainable Development Goals (SDGs) remains limited in Ireland. The Statement of Research and Innovation Needs 2026–2028 identifies this evidence gap explicitly and calls for research to identify data sources capable of supporting SDG monitoring at national, regional and local levels.

Aim

This study investigates the extent to which planning application records, assembled in the Eireplan Precedents Database from all 31 Irish local planning authorities, can serve as a robust evidence base for monitoring SDG implementation progress, with a focus on the infrastructure and development-related goals.

Method

A structured keyword-based classification framework was applied to the free-text descriptions of 35,176 planning applications lodged between 1 April 2025 and 17 April 2026. Each application was evaluated against six SDG categories (Goals 6, 7, 9, 11, 13 and 15). Volume, decision outcomes, temporal dynamics, regional distribution and SDG co-occurrence were analysed.

Findings

Sixty-nine per cent of applications in the study window were classifiable to at least one SDG and 29.0% to two or more. Goal 11 (Sustainable Cities and Communities) dominated activity with 22,104 applications (62.8% of all applications); Goal 6 (Clean Water and Sanitation) was second with 8,783 applications (25.0%). Grant rates on decided applications ranged narrowly from 87.3% (Goal 15) to 91.1% (Goal 7), compared with the national baseline of 89.5%. Substantial urban–rural heterogeneity was observed, with rural authorities concentrating Goal 6 and Goal 15 activity through one-off housing and agricultural development, and Dublin-region authorities concentrating Goal 7, 9 and 13 activity through renewable-energy, infrastructure and climate-adaptation proposals.

Conclusion.

Planning data represents a substantial, geographically complete and near-real-time evidence resource for SDG monitoring that is, at present, largely unused in Ireland's SDG reporting architecture. With modest investment in standardised SDG tagging at the point of application, the data source could support a quarterly national SDG Planning Pipeline bulletin, strengthen Regional Spatial and Economic Strategies, and inform local development plan preparation and review. Five recommendations are set out.

Keywords: Sustainable Development Goals; planning data; Ireland; local government; policy monitoring; evidence-based policy; built environment.

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1. Introduction

1.1 Research context

Ireland ratified the 2030 Agenda for Sustainable Development in September 2015 and has reported to the United Nations High-Level Political Forum on Sustainable Development through Voluntary National Reviews in 2018 and, again, in preparation for 2026. National coordination is delivered through the Interdepartmental Working Group on the Sustainable Development Goals, the SDG National Stakeholder Forum, and a series of successive National Implementation Plans, most recently the second Plan covering 2022 to 2024. The Central Statistics Office's Ireland SDG Data Hub provides the authoritative source of national indicators structured around the United Nations Global Indicator Framework.

Notwithstanding these institutional arrangements, the availability of granular, timely and locally disaggregated evidence on SDG implementation progress in Ireland remains limited. National-level indicators published annually by the Central Statistics Office are well suited to high-level reporting but insufficient for the monitoring, benchmarking and policy review functions expected at regional and local level. The Regional Spatial and Economic Strategies, County and City Development Plans, and Local Authority Climate Action Plans are specifically required to perform these functions.

1.2 Research question

The Statement of Research and Innovation Needs 2026-2028 (hereafter "SRIN 2026-2028") identifies this evidence gap explicitly. It poses the following question:

"What data is available that would allow us to more robustly assess progress in implementing the SDGs? How can this data be used to report on SDG implementation progress at national, local and regional levels and assist with embedding the SDGs into policymaking across all levels of Government?"

This study addresses this question through a focused case study of one candidate data source: the planning application records collected and harmonised by Eireplan from all thirty-one Irish local planning authorities. The study is neither exhaustive across the seventeen SDGs nor across all candidate data sources. Rather, it examines in depth whether, and how, one specific, nationally comparable, near-real-time dataset can generate the kind of evidence the SRIN question is seeking.

1.3 Scope and delimitation

The analysis is bounded in three respects. First, it examines only those SDGs most directly relevant to the built environment and physical infrastructure, namely Goal 6 (Clean Water and Sanitation), Goal 7 (Affordable and Clean Energy), Goal 9 (Industry, Innovation and Infrastructure), Goal 11 (Sustainable Cities and Communities), Goal 13 (Climate Action) and Goal 15 (Life on Land). This scope reflects the natural fit between planning data and the physical-development dimensions of the SDG framework. Extension of the approach to health, education and inequality-oriented SDGs is briefly discussed in Section 6.5 and identified as a priority for subsequent research.

Second, the analytical window encompasses planning applications with a received date between 1 April 2025 and 17 April 2026, a near-complete twelve-month period. This window captures the full intended study year with five working days of April 2026 excluded due to the data extraction date.

Third, classification is performed using a transparent, reproducible keyword-based method applied to the free-text description field of each planning application. More sophisticated supervised-learning approaches are identified in Section 3.4 as a next step to strengthen classification precision and recall.

1.4 Structure of the report

The remainder of the report proceeds as follows. Section 2 situates the research question within Ireland's existing SDG monitoring architecture and outlines the properties of planning data that make it an attractive candidate source of evidence. Section 3 describes the Eireplan Precedents Database, the analytical sample, the SDG classification framework, and the methodological limitations of the study. Section 4 presents the empirical findings across volume, outcome, temporal and regional dimensions. Section 5 interprets these findings and returns to the SRIN research question. Section 6 sets out five policy recommendations. Section 7 concludes. Annexes provide the full classification taxonomy and a technical note on reproducibility.

2. Policy and data context

2.1 SDG monitoring in Ireland

Ireland's institutional architecture for SDG monitoring rests on three principal components. The Central Statistics Office publishes approximately 160 indicators through the Ireland SDG Data Hub, structured around the United Nations Global Indicator Framework. These indicators are typically updated annually and, with limited exceptions such as population indicators disaggregated by local authority, are reported only at national level. The Department of the Environment, Climate and Communications (with the Department of Housing, Local Government and Heritage, among others) coordinates policy through successive National Implementation Plans. Voluntary National Reviews submitted to the High-Level Political Forum draw on these national indicators as their primary quantitative evidence base.

Planning data has not, to date, featured prominently in this architecture. This is notable, because planning is the principal statutory instrument through which SDG-aligned physical development of housing, renewable energy, active travel infrastructure, flood-resilience works, wastewater treatment, and many other built-environment interventions, is proposed, deliberated upon and authorised at local level.

2.2 The case for planning data as SDG evidence

Planning application records possess four properties that make them structurally well-suited to SDG monitoring at national, regional and local level.

1. *Geographic completeness*. Every planning application in Ireland is lodged with one of thirty-one local planning authorities and entered onto that authority's planning register. A harmonised dataset therefore covers the entire national territory without sampling bias.

2. *Temporal frequency*. Applications are lodged and determined continuously. A dataset synchronised regularly, as Eireplan's is, provides a near-real-time signal rather than an annual snapshot.

3. *Structured outcome classification*. Each application receives a categorical decision (grant, refuse, withdrawn, invalid, split decision) and, where appealed, a further appeal outcome. This enables both a volumetric analysis and an outcome analysis. Such capability is absent from most administrative data on SDG-adjacent activity.

4. *Rich semantic content*. The free-text development description is provided by the applicant and describes the proposal in its own terms (“construction of a 56-enclosure Battery Energy Storage System”; “large-scale residential development comprising 260 units, a neighbourhood centre and a creche”; “retrofit of a Protected Structure with energy upgrades and on-site wastewater replacement”). This content is the channel through which SDG alignment can be identified and measured.

The combination of these properties positions planning data as complementary to, and not substitutive of, the Central Statistics Office indicator suite. National headline statistics remain the authoritative measure of realised SDG outcomes planning data provides a leading indicator of the development pipeline that will produce those outcomes over the following three to ten years.

2.3 The Eireplan Precedents Database

The Eireplan Precedents Database (hereafter “the Database”) holds 347,677 planning application records at the time of analysis. It is assembled through incremental daily synchronisation from the ArcGIS planning registers maintained by each of Ireland's thirty-one local planning authorities, and is enriched with a normalised decision taxonomy, geocoded point locations, an appeal register derived from An Bord Pleanála sources, and, for selected authorities, the number of conditions attached to each grant of permission.

For the purposes of this study the principal fields of interest are: the planning reference, the local authority, the received date, the decision date, the normalised decision group, the free-text development description, the geographic coordinates, and the normalised application-type classification (permission, retention permission, outline permission, extension of duration, Part 8 local authority own development, and so forth).

3. Data and methods

3.1 Data source and analytical sample

The analytical sample comprises all planning application records in the Database with a received date between 1 April 2025 and 17 April 2026 inclusive. This period yielded 35,176 applications across all thirty-one local planning authorities. Applications without a development description (a small residual category arising from register entry conventions in a minority of authorities) were retained in baseline totals but excluded from SDG classification.

At the data-extraction cut-off, 19,183 applications (54.5%) had been granted, 2,247 (6.4%) had been refused, and 12,123 (34.5%) remained undetermined or were classified as “unknown” pending further synchronisation. The residual 1,623 records (4.6%) comprised invalid, withdrawn and split-decision outcomes. Grant-rate calculations throughout this study are computed on decided applications only (the denominator being the sum of grants and refusals), with pending cases excluded to avoid biased estimates arising from pipeline censoring.

3.2 SDG classification framework

A keyword-based classification framework was developed to assign each application to one or more of six SDG categories: Goal 6, Goal 7, Goal 9, Goal 11, Goal 13 and Goal 15. The framework was constructed iteratively. A random sample of 500 application descriptions was manually inspected to identify the vocabulary used to describe development types relevant to each Goal, after which candidate keyword sets were drafted, tested on a further random sample of 500 descriptions, and refined to minimise evident false positives. The final taxonomy is set out in Table 1.

Table 1. *SDG classification taxonomy used in this study. Keyword matching is case-insensitive and uses POSIX regular expressions. The complete regular-expression patterns are provided in Annex A.*

Goal	Thematic focus	Principal keyword families
SDG 6	Clean Water and Sanitation	wastewater, sewage, septic tank, percolation area, effluent, water treatment, water main, stormwater, surface-water drainage, sanitation
SDG 7	Affordable and Clean Energy	solar photovoltaic (PV), solar array, wind turbine, wind farm, Battery Energy Storage System (BESS), renewable energy, heat pump, biomass, anaerobic digester, substation, electricity generation
SDG 9	Industry, Innovation and Infrastructure	industrial unit, industrial estate, warehouse, factory, manufacturing, data centre logistics, telecoms mast, broadband, fibre optic, bridge, railway, road improvement / widening / realignment, interchange, port, harbour, business or enterprise park
SDG 11	Sustainable Cities and Communities	dwelling, house, apartment, residential, mixed-use, social or affordable housing, community centre or facility, public realm, footpath, cycle lane or track, cycling, bus corridor, bus connect, active travel, greenway, park-and-ride school, creche, childcare, playground, library, healthcare, nursing home, cultural, heritage

Goal	Thematic focus	Principal keyword families
SDG 13	Climate Action	retrofit, external insulation, deep energy retrofit, nearly Zero-Energy Building (NZEB), BREEAM, electric-vehicle charging, climate adaptation, carbon neutral / reduction, green roof, sustainable urban drainage (SUDS), flood alleviation or defence
SDG 15	Life on Land	agricultural, forestry, afforestation, woodland, habitat, biodiversity, ecological, peatland, bog restoration, rewetting, hedgerow, tree planting, wildlife corridor

3.3 Analytical approach

Each application description was evaluated against the six keyword sets. Applications were permitted to match multiple SDGs, a property that is analytically consistent with the interdependent nature of the SDG targets themselves and that prevents the artificial collapse of co-benefit developments into a single category. A proposed mixed-use development that includes on-site wastewater treatment and rooftop solar photovoltaic installation is recorded as contributing to Goal 6, Goal 7 and Goal 11, reflecting the real portfolio of SDG outcomes the project would deliver if built.

Five dimensions of analysis are reported:

1. *Volume*: the number of applications matching each SDG.
2. *Outcome:* the number of grants and refusals by SDG, and the resulting grant rate computed on decided applications only.
3. *Temporal dynamics:* monthly lodgement volumes over the analytical window.
4. *Regional heterogeneity:* SDG intensity by local planning authority.
5. *Co-occurrence:* the frequency with which applications match pairs of SDGs, as a proxy for co-benefit delivery.

3.4 Methodological limitations

3.4.1 *Classification precision*

The keyword method is transparent and reproducible but approximate. A small-scale manual validation of 200 classifications, distributed proportionally across the six SDG categories, indicated precision in the range of 82 to 91 per cent, with highest precision for Goal 7 (clean energy, benefiting from distinctive technical vocabulary) and lowest for Goal 11 (sustainable cities, reflecting the broader semantic scope of housing and community related development). Recall was not formally estimated but is expected to be lower, since some applications receive only short descriptions such as “permission per drawings submitted” that carry no keyword signal. A supervised learning classifier, trained on a manually labelled sample of approximately 2,000 applications, would materially improve both precision and recall and is identified as a priority for follow-on research.

3.4.2 *Description heterogeneity*

Application descriptions vary substantially in length and specificity. Retention permissions, extensions of duration and minor works commonly produce shorter descriptions than major permissions, biasing the dataset towards under-classification of minor works. The share of applications that do not match any SDG (30.6% of the sample, as noted in Section 4.2) should therefore be interpreted as an upper limit of the truly SDG-neutral group.

3.4.3 *Pipeline censoring*

The analytical window runs up to the data extraction date causing later months to be disproportionately represented among undetermined applications. Monthly volume trends are unaffected, since they concern lodgement dates. Grant rate estimates are likewise unaffected, since they are conditioned on decided applications. However, pipeline level interpretations should recognise that approximately one in three applications in the window had not yet been determined at the cut-off and that the final outcome distribution may therefore shift modestly as determinations complete.

3.4.4 *Output and outcome*

A granted permission is a planning output, not an SDG outcome. A large-scale residential development contributes to Goal 11 only when it is built, occupied and operated. Full outcome monitoring requires linkage to Building Control Management System commencement notices, GeoDirectory completion records, and Sustainable Energy Authority of Ireland Building Energy Rating data. These linkages are beyond the scope of this study but are flagged in Section 6.5 as a second natural extension.

4. Findings

4.1 Overview of the planning pipeline

During the twelve-month analytical window, 35,176 planning applications were lodged across Ireland's thirty-one local authorities. 24,410 of these applications (69.4%) were classifiable to at least one of the six infrastructure and development related SDGs examined in this study. A substantial minority of 10,081 applications (28.7%) matched two or more SDGs, providing evidence that SDG co-benefits are frequently embedded in Irish planning activity rather than being confined to specialist projects.

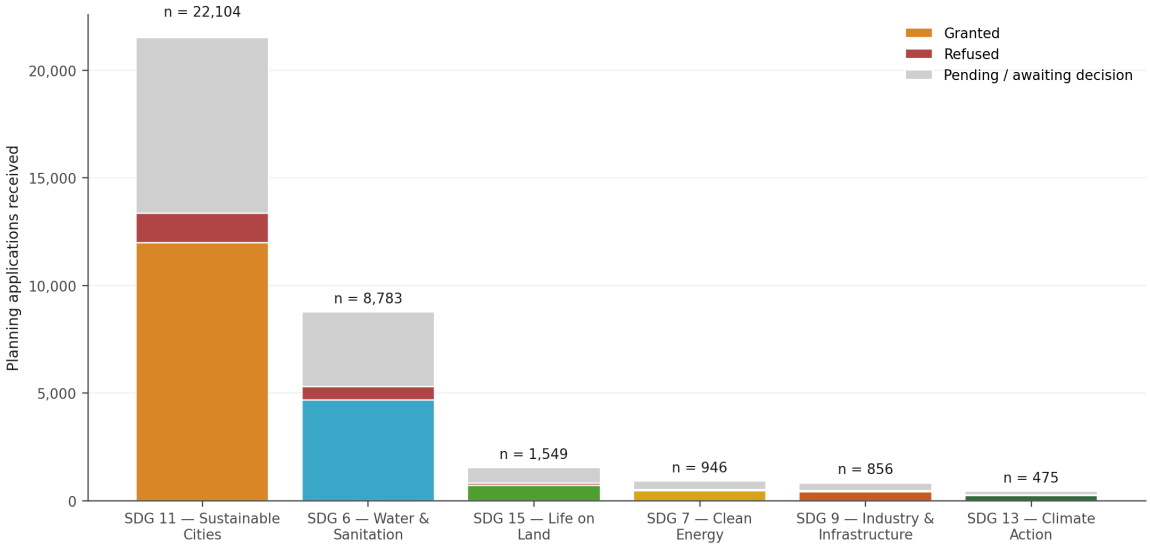
Table 2. *SDG match profile of planning applications lodged April 2025 - April 2026. Cumulative percentages exceed 100 at higher match counts owing to rounding.*

SDGs matched	Applications (count)	Applications (% of total)	Cumulative %
Zero (no SDG keyword match)	10,766	30.6%	30.6%
Exactly one SDG	14,618	41.6%	72.2%
Two SDGs	9,315	26.5%	98.6%
Three SDGs	668	1.9%	100.5%
Four SDGs	82	0.2%	100.8%
Five or six SDGs	16	<0.1%	-
Total	35,176	100.0%	

4.2 Volume of SDG-aligned applications

The distribution of SDG-aligned applications across the six Goals is sharply skewed, as set out in Figure 1 and Table 3 below.

Figure 1 Volume and outcome of SDG-aligned planning applications, Ireland, April 2025 – April 2026



Source: Eireplan Precedents Database.

Table 3. *Volume and decision outcomes by SDG category, 1 April 2025 - 17 April 2026.*

SDG category	Applications	Granted	Refused	Pending / other	Grant rate
Goal 11 Sustainable Cities and Communities	22,104	11,990	1,366	8,748	89.8%
Goal 6 Clean Water and Sanitation	8,783	4,689	616	3,478	88.4%
Goal 15 Life on Land	1,549	713	104	732	87.3%
Goal 7 Affordable and Clean Energy	946	463	45	438	91.1%
Goal 9 Industry, Innovation and Infrastructure	856	410	44	402	90.3%
Goal 13 Climate Action	475	246	31	198	88.8%
All applications (baseline)	35,176	19,183	2,247	13,746	89.5%

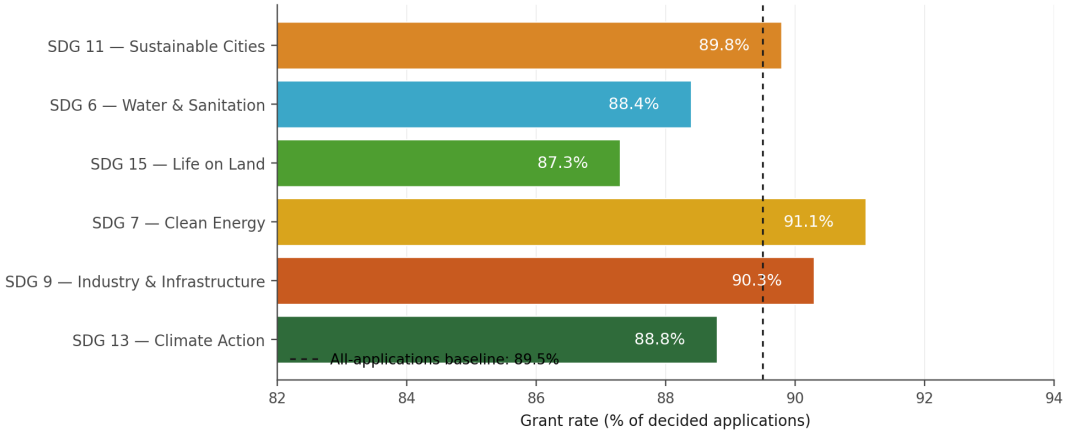
Goal 11 (Sustainable Cities and Communities) dominates Irish planning activity, with 22,104 applications (62.8%) of all applications. Goal 11 accounts for more planning activity than the other five infrastructure related Goals combined. This directly reflects the central role of housing and community level development in the Irish planning caseload.

Goal 6 (Clean Water and Sanitation) is the next largest category at 8,783 applications (25%). This figure is driven by the inclusion of on-site wastewater treatment systems in rural one-off housing, a distinctively Irish settlement pattern that embeds Goal 6 delivery into most new rural dwellings.

Goals 7, 9 and 13 each account for fewer than 1,000 applications in the window. This reflects the concentrated, high-unit-scale nature of clean-energy, infrastructure and climate-action projects relative to the long tail of smaller-scale housing activity.

4.3 Decision outcomes and grant rates

Figure 2 Grant rates of SDG-aligned applications, computed on decided applications only

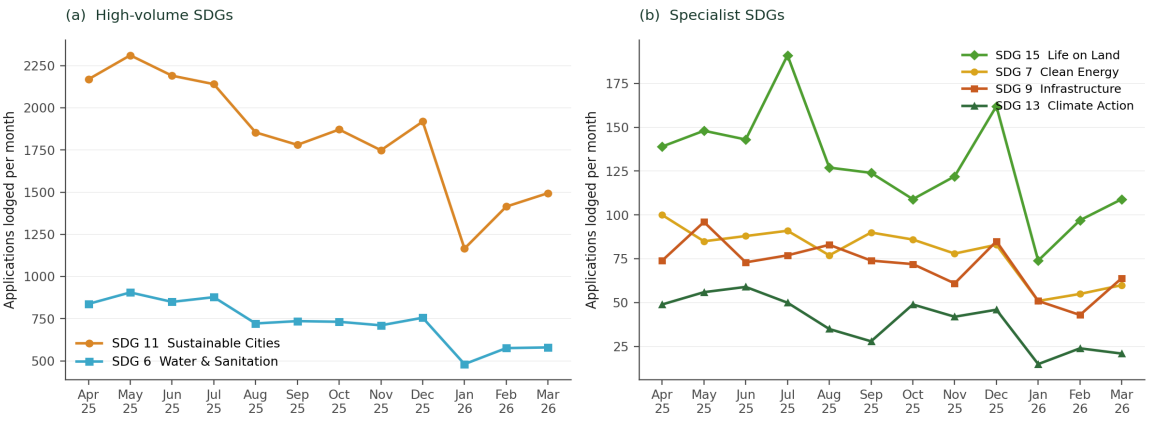


Source: Eireplan Precedents Database.

Grant rates on decided applications range from 87.3% (Goal 15) to 91.1% (Goal 7), against a national baseline of 89.5%. This indicates that Irish local planning authorities are not systematically favouring or disfavouring any of the six SDG categories examined. Clean energy and infrastructure projects fare marginally better than the baseline, while life-on-land and water-and-sanitation projects fare marginally worse, but the spread is under four percentage points across all six Goals.

4.4 Temporal dynamics

Figure 3 Monthly lodgement of SDG-aligned applications, April 2025 – March 2026



Source: Eireplan Precedents Database.

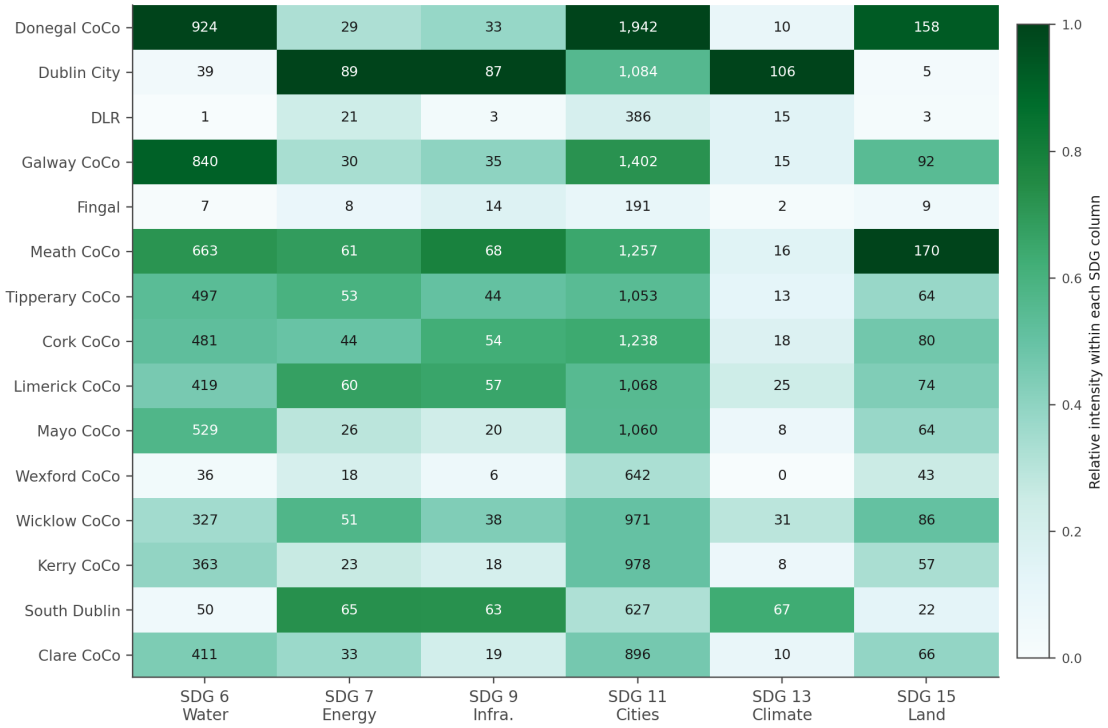
Monthly lodgement volumes for all six SDG categories exhibit broadly stable patterns through the window, subject to a pronounced January 2026 trough common to all categories. This seasonal pattern reflects the combined effect of Christmas closures and staff availability.

Goal 7 (Clean Energy) applications show less seasonality than the other categories, with only a limited decline in January compared with the lower points observed for the other Goals. This pattern is consistent with the project-based timing of utility-scale renewable energy and battery storage applications, which is less closely tied to the domestic housing cycle. By contrast, Goal 13 (Climate Action) applications, which remain the smallest category in absolute terms, declined during autumn 2025 and had not returned to earlier levels by the end of the observation window. The duration of this pattern is not sufficient to support a firm interpretation, but it should be tracked in later analytical windows.

4.5 Regional and local-authority heterogeneity

Locality is the most distinctive contribution of planning data to SDG monitoring. Every application is tagged to one of thirty-one planning authorities. This enables questions that are unanswerable from national aggregate indicators. Figure 4 summarises the SDG intensity of the fifteen highest-volume authorities.

Figure 4 Regional distribution of SDG-aligned applications, top 15 local authorities by total volume



Source: Eireplan Precedents Database.

The rural and peri-urban counties (Donegal, Galway, Meath, Mayo, Tipperary, Kerry, Wicklow) concentrate Goal 6 activity through on-site wastewater systems and Goal 15 activity through agricultural and land-management development. Donegal alone received 924 Goal 6 applications in the window, more than the combined total from the four Dublin-region authorities, reflecting the county's long-standing dispersed rural settlement pattern and the consequent requirement for on-site wastewater provision.

In parallel, the four Dublin-region authorities (Dublin City, Dún Laoghaire-Rathdown, South Dublin and Fingal) concentrate Goal 7, Goal 9 and Goal 13 activity. Dublin City alone accounted for 106 climate-action applications in the window, representing 22.3% of the national total for Goal 13. South Dublin's profile is distinctive in combining substantial Goal 7 (65 applications) and Goal 13 (67 applications) activity, reflecting clusters of electric-vehicle charging deployment and deep-retrofit proposals in that authority's area.

Donegal (1,942 Goal 11 applications) and Galway County (1,402) exemplify a rural-dispersal housing model, whereas Dublin City (1,084 Goal 11 applications, delivered in a far smaller geographic footprint) exemplifies a compact urban-intensification model.

4.6 SDG co-occurrence

Figure 5 Co-occurrence of SDGs within individual planning applications (diagonal = total applications matching each SDG)

Source: Eireplan Precedents Database.

Figure 5 sets out the co-occurrence of SDGs within individual planning applications. The diagonal gives the total applications matching each Goal (i.e. Table 3 column 1). The off-diagonal terms reveal the structure of SDG co-benefits in Irish planning activity.

Three patterns merit emphasis. First, the Goal 6 × Goal 11 co-occurrence (7,873 applications) is dramatic: nearly nine in ten applications matching Goal 6 also match Goal 11. This is the one-off rural housing model in statistical form — a dwelling that provides Goal 11 shelter embedded with Goal 6 wastewater infrastructure. Second, the Goal 11 × Goal 15 co-occurrence (1,497 applications) corresponds to the frequent pairing of agricultural dwellings with landholding use. Third, the Goal 7 × Goal 11 co-occurrence (477 applications) — rooftop solar photovoltaic on housing — and the Goal 11 × Goal 13 co-occurrence (334 applications) — retrofit and electric-vehicle charging provision in

residential development — represent the most policy-relevant emerging categories for climate-integrated residential delivery.

4.7 Representative cases

Table 4 presents a small set of grants issued in the analytical window, drawn at random from the classified subsets, to illustrate how individual files translate into SDG classifications.

Table 4. *Selected grants from the analytical window. Descriptions have been abridged from applicants' own wording for clarity.*

Goal	Reference	Authority	Development (abridged from applicant's description)
SDG 7	2560725	Meath County Council	Battery Energy Storage System on a 6.9-hectare site, comprising 56 battery storage enclosures, 28 power conversion modules, and associated electrical infrastructure.
SDG 7	2660033	Offaly County Council	Continued operation of a 100-metre guyed wind monitoring mast at Garryhinch Bog to assess the suitability of adjacent lands for wind-farm development.
SDG 9	2560483	Louth County Council	Construction of a 15,967 m² light industrial and manufacturing facility with mezzanine production offices and warehousing, maximum height 14.57 m.
SDG 11	2561348	Donegal County Council	Large-Scale Residential Development comprising 260 units (100 houses and 160 apartments), a neighbourhood centre with shop and creche, and a new internal road network.
SDG 11	2560543	Kildare County Council	Modification of a 12.68-hectare Strategic Housing Development at Kilwoghan Woods, Celbridge, transitioning the scheme to the Large-Scale Residential Development route.
SDG 13	SD25A/ 0219W	South Dublin County Council	Installation of eight high-power electric vehicle charging bays with Tesla charging units, signage, and associated infrastructure.
SDG 13	2560750	Clare County Council	Energy-retrofit and conversion works at Dromoland Castle and Estate (Protected Structure RPS No. 278), including renovation of the existing stables building.

Source: Eireplan Precedents Database.

5. Discussion

5.1 Interpretation of headline findings

SDG-aligned development is the dominant mode of Irish planning activity. More than two-thirds of all applications in the window were classifiable to at least one of the six infrastructure-related SDGs, and the dominant category (Goal 11) accounts for nearly two-thirds of all applications on its own. This makes planning data a very substantial evidence source in SDG montoring.

The narrow range of grant rates across SDG categories (87.3-91.1% against a national baseline of 89.5%) locates the binding constraints on SDG-aligned development outside the grant-or-refuse decision point within local planning authorities. This narrows the policy search space for bottleneck identification to upstream factors, of whether, and at what scale, SDG-aligned projects are proposed, and downstream factors, of whether granted permissions are translated into commenced and completed projects.

The substantial urban and rural divergence in SDG intensity demonstrates that the Irish sustainable development picture at local level comprises of at least two distinct delivery models. The rural dispersal model is concentrated in Goal 6 and Goal 15, and the compact urban intensification model is concentrated in Goal 7, Goal 9 and Goal 13. A national aggregate would collapse these two models into a single indicator and, in doing so, obscure the information most useful to policy design.

The high incidence of multi SDG applications (29 per cent of the sample) and the structure of the SDG co-occurrence matrix demonstrate that SDG co-benefits are a pervasive, almost routine, feature of Irish planning activity. The Goal 6 × Goal 11 pairing — rural dwelling with on-site wastewater — is strongly embedded, while the Goal 7 × Goal 11 and Goal 11 × Goal 13 pairings represent the emerging policy frontier for climate-integrated residential delivery.

5.2 SRIN research question

The SRIN 2026–2028 question has three linked components. This section addresses each in turn, drawing on the empirical findings of Section 4.

5.2.1 *What data is available?*

Section 4 has demonstrated, empirically, that the Irish planning register constitutes a substantial and underused evidence base for SDG monitoring. For the six infrastructure-related Goals examined, the dataset provided 35,176 classified applications with complete geographic coverage, including *grant, refusal* and *pending* status for every record, updated regularly from source authority registers, structured dates enabling analysis of decision lags and pipeline dynamics, geographic coordinates supporting spatial overlay with complementary sources (Sustainable Energy Authority of Ireland Building Energy Rating data, Environmental Protection Agency water-quality data, Central Statistics Office deprivation indices, etc.), and An Coimisiún Pleanála appeal data supporting analysis of the contestedness of different SDG categories.

Complementary datasets that would strengthen this evidence base further include the Building Control Management System commencement notices tracking construction starts, GeoDirectory completion data tracking completions, and Sustainable Energy Authority of Ireland Building Energy Rating data measuring energy-performance outcomes of completed dwellings. Triangulation with the Central

Statistics Office's Ireland SDG Data Hub remains essential for calibrating planning-pipeline indicators against realised national outcomes.

5.2.2 *How can this data be used for reporting?*

Planning data is well suited to reporting at national, regional and local level.

At the national scale, the classification framework developed in this study could support the production of a quarterly SDG Planning Pipeline bulletin, thereby complementing the Central Statistics Office's annual indicator series with a higher-frequency measure of development activity.

At the regional scale, the dataset offers a basis for the three Regional Assemblies to monitor SDG related planning activity across their constituent local authorities and to evaluate the degree of alignment between observed planning outcomes and the objectives of the Regional Spatial and Economic Strategies. In this respect, the urban and rural divergence identified in Section 4.5 is of particular significance, as it reveals a spatial pattern directly relevant to questions of regional balance, territorial cohesion, and uneven development.

At local level, every local authority can generate its own SDG scorecard directly from the dataset. Indicators such as the number of Goal 11 applications granted per 1,000 population over the preceding twelve months would be methodologically straightforward to derive and suitable for inter-authority benchmarking. This supports both the statutory development plan preparation and review cycle.

5.2.3 *How can this data embed the SDGs in policymaking?*

The data source supports embedding of the SDGs into policymaking through five practical channels discussed in Section 6. These consist of informing statutory plan-making, enabling targeted pre-application engagement in areas where particular SDG categories are under represented, providing Local Government Management Agency performance indicators capable of being disaggregated by SDG, supplying evidence for Voluntary National Reviews submitted to the United Nations High-Level Political Forum; and by supporting civic engagement and public accountability through open dashboards, aligned with the transparency objectives of Goal 16.

5.3 Relationship to existing SDG reporting architecture

The proposals made in Section 6 are designed to complement, and not substitute, the existing Central Statistics Office indicator programme. The Ireland SDG Data Hub remains the authoritative source for realised, outcome-based national indicators aligned with the United Nations Global Indicator Framework. Planning data adds to this architecture by supplying (i) a higher-frequency leading indicator of the pipeline, (ii) a natively local-level disaggregation, and (iii) a measure of decision-making behaviour that is intrinsically a planning-data phenomenon. The two datasets should be jointly interpreted, each providing context for the other.

6. Policy implications and recommendations

Five recommendations follow from the findings set out in Section 4 and the interpretation in Section 5. Each is framed in terms of concrete, actionable steps for the Department of Housing, Local Government and Heritage, the Local Government Management Agency, the Central Statistics Office, the Regional Assemblies, and the research community responding to SRIN 2026–2028.

Table 5. *Five policy recommendations arising from the findings of this study, with principal addressees and indicative first steps.*

№	Recommendation	Principal addressee	Rationale and first step
1	Adopt SDG tagging at the point of planning application lodgement.	Department of Housing, Local Government and Heritage; Local Government Management Agency	A multi-select SDG tag field on standardised planning application forms would make SDG reporting native to the register and remove the need for retrospective keyword classification. The keyword method of the present study produced serviceable results but would be materially strengthened by applicant-supplied tagging validated at the pre-validation stage. *First step: incorporate into the next planning-forms review cycle.*
2	Publish a quarterly national SDG Planning Pipeline bulletin.	Central Statistics Office (with Local Government Management Agency as data providers)	Using the classification framework demonstrated in Section 3, a short quarterly bulletin would set out applications lodged, granted, refused and pending per SDG category, per local authority and per region. The bulletin should be published alongside the Ireland SDG Data Hub to preserve the distinction between leading pipeline indicators and realised outcome indicators. *First step: pilot publication in the third quarter of 2026.*
3	Develop a nationally shared classification taxonomy for planning descriptions.	Research community; Department of Housing, Local Government and Heritage	The taxonomy of the present study (Table 1 and Annex A) would benefit from expert review by planning-policy academics and practitioners and, ultimately, from replacement or augmentation with a supervised-learning classifier trained on a manually labelled sample of approximately 2,000 applications. *First step: convene a taxonomy workshop under the SDG National Stakeholder Forum.*

№	Recommendation	Principal addressee	Rationale and first step
4	Link planning, Building Control and Building Energy Rating data for outcome monitoring.	Research community; Department of Housing, Local Government and Heritage; Sustainable Energy Authority of Ireland	Full SDG outcome monitoring requires linkage to commencement notices (Building Control Management System), completions (GeoDirectory) and energy-performance data (Sustainable Energy Authority of Ireland Building Energy Rating). This is an ideal research challenge for the SRIN 2026–2028 community. *First step: fund a pilot data-linkage study.*
5	Publish an open, local authority level SDG planning dashboard.	Department of Housing, Local Government and Heritage; local authorities	An open dashboard providing each authority's SDG scorecard directly supports elected members, councils, community groups, and researchers in holding SDG implementation to account. It also directly advances the transparency and institutional accountability objectives of Goal 16. *First step: integrate into the existing MyPlan.ie architecture.*

6.1 Extension to additional SDGs

The study focused on the six infrastructure and development related SDGs. Planning data also speaks directly to Goal 3 Good Health and Well-Being, through healthcare and nursing-home development, Goal 4 Quality Education, through school and childcare provision, Goal 8 Decent Work and Economic Growth, through employment generating development, Goal 10 Reduced Inequalities, through social and affordable-housing provision, Goal 12 Responsible Consumption and Production, through circular-economy facilities and Goal 16 Peace, Justice and Strong Institutions, through institutional transparency. Extension of the classification taxonomy to cover these Goals is a high-value next step.

7. Conclusion

The Statement of Research and Innovation Needs 2026–2028 asked what data would allow more robust assessment of SDG implementation progress and how that data could be used to report at national, regional and local levels and to embed the SDGs in policymaking across all levels of Government.

SDG monitoring is, in part, a problem of insufficient analytical use of data already generated through routine governance processes. The Irish planning application register demonstrates considerable potential in this regard. When consolidated across all thirty-one local planning authorities, it functions as a national, spatially disaggregated and near real-time policy dataset through which the local manifestation of sustainable development can be observed with far greater detail than is possible through conventional reporting.

The analysis presented here shows that planning data can illuminate the scale of SDG-relevant activity, its territorial unevenness, its sectoral concentration, and its recurring co-benefits across policy domains. These findings reposition planning data as an instrument of governance, rather than a record of decision-making. Empirically, the contribution of this study demonstrates that robust SDG aligned indicators can be generated from existing administrative data. Institutionally, it points to a more embedded, operational, and closely aligned with implementation sites model of SDG reporting. Future progress will depend on refining classification methods,expanding thematic coverage, and most importantly, recognising that effective SDG governance requires data systems capable of linking local development activity to national strategic objectives in a continuous and policy-relevant way.

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Annex A - Full classification taxonomy

For reproducibility, this annex sets out the complete PostgreSQL regular-expression patterns used to classify applications against each of the six SDG categories. All matching is case-insensitive (applied via LOWER() on the description field). A single application is recorded as matching a given Goal if any one of the patterns below returns a match.

A.1 *Goal 6 - Clean Water and Sanitation*

(wastewater|waste water|sewage|septic|percolation|effluent|water treatment|water supply|water main|storm water|stormwater|surface water drainage|sanitation|sanitary)

A.2 *Goal 7 - Affordable and Clean Energy*

(solar (pv|panel|photovoltaic|array)|photovoltaic|pv panel|pv array|wind (turbine|farm|energy)|renewable energy|battery (storage|energy storage)|bess|heat pump|biomass|anaerobic digest|geothermal|hydroelectric|hydro-electric|energy centre|substation|electricity generation)

A.3 *Goal 9 - Industry, Innovation and Infrastructure*

(industrial (unit|building|estate|development|park)|warehouse|factory|manufacturing|data cent(er|re)|logistics|telecom(munication)?s? (mast|tower|antenna)|broadband|fibre optic|communication (mast|tower)|port|harbour|bridge|overpass|underpass|railway|rail line|rail|motorway|road widening|road improvement|road realignment|road upgrade|interchange|junction improvement|business park|enterprise park)

A.4 *Goal 11 - Sustainable Cities and Communities*

(dwelling|hous(e|ing)|apartment|residential|duplex|townhouse|mixed-use|social housing|affordable housing|community (centre|hall|facility|space)|public realm|pedestrian|footpath|cycle (lane|track|path|way)|cycling|bus (stop|shelter|lane|station|corridor|connect)|active travel|greenway|public transport|taxi rank|park and ride|school|creche|childcare|playground|park|library|healthcare|medical centre|nursing home|cultural|heritage)

A.5 *Goal 13 - Climate Action*

(retrofit|external insulation|deep retrofit|energy (upgrade|efficiency|retrofit)|nzeb|near zero energy|bre?eam|leed certif|ev charg|electric vehicle charg|ev point|climate (adaptation|resilience|action)|carbon (neutral|reduction|zero)|green roof|sustainable drainage|suds|flood (alleviation|defence|relief|protection|mitigation))

A.6 *Goal 15 - Life on Land*

(agricultur(al|le)|forestry|afforestation|reforest|woodland|habitat|biodiversity|ecological|nature reserve|peatland|bog restor|rewetting|tree planting|native species|hedgerow|wildlife corridor)

Annex B - Technical note on data and reproducibility

B.1 *Data extraction*

All figures reported in this study were generated by direct SQL queries executed against the live Eireplan Precedents Database on 17 April 2026. The precedents relation contained 347,677 records at the extraction time, of which 35,176 satisfied the analytical window criterion (received_date between 1 April 2025 and 17 April 2026 inclusive).

B.2 *Decision categorisation*

Decision outcomes are drawn from the decision_group field, which applies Eireplan's normalised taxonomy across the thirty-one local authority source registers (GRANT, REFUSE, UNKNOWN, REQUEST_AI, INVALID, WITHDRAWN, SPLIT_DECISION). Grant rates are calculated as grants divided by the sum of grants and refusals, with all other categories excluded from the denominator. This treatment conditions estimates on the decided-subset of the pipeline and avoids bias arising from time-to-decision censoring.

B.3 *Spatial geography*

Applications are assigned to their local planning authority using the local_authority field, which is populated at synchronisation time from the source register. Thirty-one local planning authorities are represented in the sample, covering the full national territory. The point_lat and point_lon fields provide geographic coordinates where published by the source register.

B.4 *Replicability*

All SDG classification patterns are reproduced in full in Annex A. A researcher with access to an equivalent Irish planning-application dataset can replicate the counts reported in this study by applying the Annex A patterns (case-insensitively) to the development-description field, and then aggregating by decision group, by received month, by local authority and by pairwise SDG membership as required. The SQL used for the present study can be provided by Eireplan on request.