Implementing the Energy Efficiency First Principle in Regional Planning

POLICY BRIEF

October 2025

In a nutshell

Local Authorities are at the frontline of Ireland's energy transition. They prepare and enforce the development and climate action plans that directly affect housing, transport, and local services. Applying the Energy Efficiency First (EE1st) principle in these plans means **prioritising cost-effective energy savings** before committing to new supply or infrastructure. In practice, this ensures that limited resources deliver the greatest value: lower energy bills, healthier homes, and resilient communities.

In the South-East region (Carlow, Kilkenny, Wexford, and Waterford), the Regio1st project worked with county councils to make EE1st practical. At first, the principle was perceived as distant and abstract. By linking it to local priorities, housing retrofits, mobility, urban regeneration, and using tailored communication tools, workshops, and cross-departmental dialogue, local authorities began to see its added value. They now better understand EE1st, but they also highlighted persistent obstacles: **unclear national guidance, fragmented funding, and lack of long-term support.**

Local authorities have shown willingness to integrate EE1st into their plans. To succeed, they need:

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- Clear national interpretation of EU obligations, including cost-benefit analysis requirements
- Stronger technical support from energy agencies and CAROs
- Predictable funding streams, rather than fragmented short-term grants

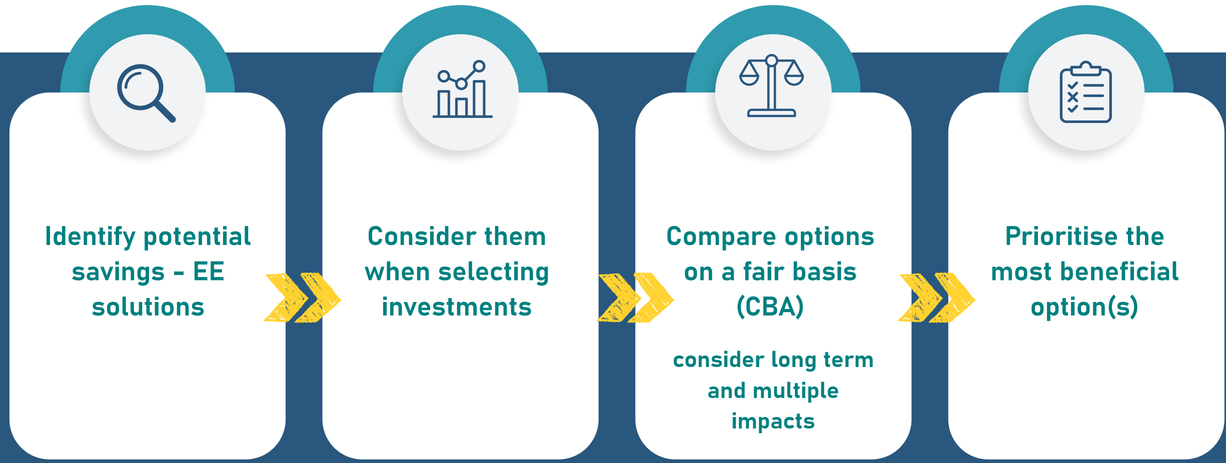
Support already exists. SEAI schemes (Community Energy Grants, BEUS, SSRH, EXEED, Microgeneration, and more) provide financing options, some directly accessible to local authorities and others that can be promoted for county-wide partnerships. European tools such as Regio1st and MICAT add methods for planning and assessing wider benefits. CAROs and regional energy agencies provide guidance, training, and coordination.

Looking ahead, EE1st should not be treated as a one-off obligation, but as an iterative process. Councils can begin with no-regret actions such as public lighting or retrofitting, while steadily embedding efficiency checks into development plans and climate strategies. With continuous guidance, stable financing, and ongoing dialogue across governance levels, EE1st can become a normal way of planning in Ireland, raising ambition and making the transition both affordable and community-driven.

The basics

Energy Efficiency First Principle[1]: Prioritise energy demand reduction through cost-efficient energy efficiency measures in energy planning, policy and investment decisions. In practice, the EE1st principle balances demand and supply options to prioritise the most beneficial energy investments for the concerned community.

This is done by means of cost-effective end-use energy savings, demand response initiatives and more efficient energy supply.



The CBA does not make the decision, it helps in making it, depending on priorities.

[1] Defined in 2018's Governance Regulation, reinforced in 2023's recast

EU context and policies

The European EE1st context and implementation is mainly set in the recast Energy Efficiency Directive[2], in particular:

- **Article 3 defines EE1st and sets the general frame** and highlights that the principle should be applied wherever it is relevant, including in regional plans;
- **Article 25 requires regional and local authorities to prepare local heating and cooling plans** in municipalities with 50 000+ inhabitants

In the perspective of EU-wide infrastructure development, TEN-E[3] also requires cost-benefit analysis to integrate EE1st principle in the planning of regional electricity, gas (incl. hydrogen) and district heating networks.

Irish context

Regulatory framework

Ireland's regulatory framework for energy and climate planning combines national, regional, and local instruments. At the national level, the most relevant strategies are **Project Ireland 2040 (National Planning Framework and National Development Plan), the National Renewable Energy Action Plan (NREAP), the National Energy Efficiency Action Plan (NEEAP), the Offshore Renewable Energy Plan, the National Energy and Climate Plan (NECP), the Climate Action Plan 2023, and the National Mitigation Plan**. The legal basis is provided by the Climate Action and Low Carbon Development Act 2015, which commits Ireland to transition to a low-carbon, climate-resilient economy.

The Southern Regional Assembly (SRA) is responsible for translating these national frameworks into regional orientations. Its Regional Spatial and Economic Strategy (RSES) ensures alignment between local authority plans and national objectives, while EU funds such as the Southern Eastern & Midland Regional Programme 2021–2027 provide financial support for projects that promote smart, green, and just regional development.

The counties (local authorities), however, have the crucial role: they are the level where binding rules are made and enforced. Development plans, climate action strategies, and local adaptation frameworks are county responsibilities, making them the decisive actors in delivering the energy transition.

[2] Directive (EU) 2023/1791 on Energy Efficiency
[3] Directive 2022/869 on guidelines for trans-European energy infrastructure (TEN-E)

At present, the Southern Region does not yet have a dedicated energy and climate plan, but a regional decarbonisation plan is expected in 2024. In the meantime, counties continue to advance their own climate actions, though they face challenges such as limited resources, data gaps, and low public awareness.

Regional energy planning process

Our work under Regio1st focused on the South East region: Carlow, Kilkenny, Wexford, and Waterford county councils. This experience highlighted the central role of councils as the primary decision-makers for energy and climate planning. While the Southern Regional Assembly (SRA) provides orientations through the RSES, and national government sets the overall framework, it is county councils that prepare and implement the plans which directly shape the transition on the ground.

From this process, several lessons emerge that are directly relevant to other Irish regions and county councils:

Delayed national guidance slows local action, but Regio1st allowed to partially fill this gap.

Ensure and advocate for the timely transposition of EU directives (such as the Energy Efficiency Directive recast) and provide clear national guidance, so local authorities can plan ahead and act early.

County Councils are central to delivery but need stronger support.

Reinforce and expand the role of Climate Action Regional Offices (CAROs), and encourage SEAI to provide more targeted guidance, technical support, and resources to counties, helping them plan and implement energy and climate actions effectively.

Energy efficiency is not yet systematically integrated into county planning.

Embed the EE1st principle by :

- **Requiring Cost-Benefit Analyses (CBA) to guide investment decisions.**
- **Providing clear national guidance on the Energy Efficiency Directive (EED) to clarify mandatory requirements.**
- **Incorporating efficiency criteria into development plans and local climate action plans.**
- **Using retrofit and low-carbon projects as exemplars to drive broader adoption at county level.**

Funding is fragmented and short-term.

Align EU and national programmes and secure long-term, predictable financing to give councils the stability to invest in structural change.

Public engagement is too shallow.

Move from basic consultation to proactive communication, highlighting the local benefits of decarbonisation (affordable energy, jobs, healthier environments) to build acceptance and momentum.

How to embed EE1st in regional governance structure and decisions

Initial Situation

In the South-East region (Carlow, Kilkenny, Wexford, Waterford), EE1st was not systematically applied. Local Authorities had limited awareness of the principle, its obligations under EU and national law, and the potential benefits. Decision-making often lacked mechanisms to link energy efficiency with other priorities, and coordination between departments and county councils was limited.

Actions Taken

To address these gaps, we followed a structured, practical approach using the Regio1st framework:

- Assessment of local needs: Reviewed each county's climate action plan to identify goals, barriers, and existing structures. Key stakeholders were engaged early to capture priorities and knowledge gaps.
- Mapping to Regio1st: Connected local objectives to Regio1st tools and methods. Graphic maps and visual aids were used to make the framework clear and accessible.
- Tailored EE1st strategies: Developed bespoke strategies for each county, including workshops and training. Iterative feedback encouraged collaboration within departments (energy, planning, Climate Action) and across neighbouring counties. Communication supports simplified EE1st concepts, obligations, and benefits for stakeholders.

Key Outcomes

These actions had the following impacts:

- **Local Authorities gained a better understanding and adoption of EE1st.**
- **Decision-making became more structured, linking local needs to Regio1st.**
- **Stakeholder engagement and cross-sectoral collaboration increased.**
- **The process created a replicable model for other Irish and Europeans regions.**

Lessons Learned

Based on our experience, we believe the following elements could be replicable:

01 Tailor strategies to local contexts to ensure practical and relevant implementation, reflecting each county's priorities, resources, and constraints.

02 Engage stakeholders early and continuously to build trust, encourage cross-departmental collaboration, and maintain buy-in throughout the process.

03 Use visual and communication tools—such as graphic maps, flowcharts, and simplified guides—to clearly explain EE1st obligations, practical steps, and expected benefits. These tools help stakeholders quickly understand complex concepts and facilitate discussion and decision-making.

04 Link county actions to regional and national frameworks to reinforce coherence, align with higher-level targets, and ensure that EE1st principles inform broader energy and climate planning.

Available support for regions – Policies, Funding and more

Implementing EE1st principles in Ireland relies on both strategic planning and concrete actions. Councils and regional assemblies are responsible for translating EE1st principles into measurable projects, but they require technical guidance, funding, and data support to both develop strategies and deliver energy efficiency and decarbonisation measures.

Support for Developing EE1st Strategies

Local authorities can access guidance, expertise, and capacity-building to design robust, evidence-based EE1st strategies:

- **Technical Assistance & Coordination:**
  - Energy Agencies and CAROs (Climate Action Regional Offices) are the main interlocutors for counties to design and operationalise EE1st strategies. They provide workshops, stakeholder coordination, and guidance on integrating EE1st principles across sectors.
  - European-level tools, such as Regio1st and MICAT, offer frameworks, methodologies, and technical assistance to further support EE1st strategy development and decision-making.

- **Data and Modelling Support:**
  - Energy agencies, together with SEAI, provide energy consumption datasets, modelling tools, and benchmarking resources to help councils set realistic targets, assess potential efficiency gains, and design cost-effective EE1st actions.

- **Peer Learning and Networking:**
  - Regional assemblies and energy agencies facilitate knowledge exchange and sharing of best practices from other counties or pilot projects, ensuring strategies are informed, efficient, and replicable.

Funding and Support for Implementing EE1st Actions

Local authorities can turn EE1st strategies into concrete projects using national and regional funding schemes, managed mainly by SEAI. Some of these schemes can be accessed directly by local authorities, while others are better promoted and encouraged to drive partnership-based actions across the county (e.g. with community groups, SMEs, or housing associations). Energy agencies can play a facilitation role here, helping councils design projects and coordinate actors.

Scheme	Eligible Sectors	Funding Rate	Notes
Community Energy Grants (CEG)	Public bodies, SMEs, community groups, homeowners	- **Up to 30%** for public & SME sector - **Up to 50%** for community & not-for-profits - **Set grants for households** (fuel poor & non-fuel poor)	Total past investments >€4.1m, delivered by SEEA in the year 2023
BEUS – Business Energy Upgrade Scheme	SMEs, public buildings, charities, community centres	**Up to 30%** of eligible costs	No audit or BER required upfront. Simple application.
SSRH – Support Scheme for Renewable Heat	Agri, industrial, public sector, non-domestic	- **30% capex grant** for heat pumps - **Operational tariff (15 years)** for biomass/biogas	Targeted at large users
Microgeneration Support Scheme	Homes, SMEs, community groups	**Set grant amounts** based on system size	Encourages rooftop solar PV deployment
EXEED	Large energy users (industry, large farms)	Typically **up to 30–50%,** project-dependent	Supports design-led efficiency investments. Encourages early-stage integration
Community Climate Action Fund	Local communities, sports clubs, public buildings	Project-dependent, typically **30–100%**	Focuses on climate-linked measures, often paired with retrofit or PV upgrades
LEO Energy Efficiency Grant	Micro & small enterprises	**Up to 75%**, from €750–€10,000	Must have a GreenStart report or SEAI audit done
SEAI Energy Audits (through SSEA)	SMEs	**€2,000 voucher** toward audit cost	Must spend >€10k annually on energy

Data Sources for Policy, Funding and Implementation

The following official sources can be used to identify relevant policies, funding opportunities, and guidance for EE1st-compatible actions:

- **SEAI – Grants and Supports for Communities, Businesses, and Homes;** https://www.seai.ie/grants
- **SEAI – Data and Insights** (for policy context and project justification) https://www.seai.ie/data-and-insights
- **CARO (Climate Action Regional Offices)** – Regional climate planning support; https://www.caro.ie
- **South East Energy Agency (SEEA)** – Regional examples and technical resources; https://southeastenergy.ie
- **Regio1st Planning Framework** – Guidance on integrating EE1st in planning https://Regio1st-planning-framework.fedarene.org
- **MICAT (Multiple Impacts Calculation Tool)** – Assess the wider benefits of energy efficiency projects ; https://app.micatool.eu
- **Government of Ireland – Climate Action Fund** (large-scale projects) https://www.gov.ie/en/policy-information/68fcb-climate-action-fund/
- **MyGov.ie – National and Local Schemes** (overview of climate/energy supports) https://www.gov.ie/en/campaigns/climate-action/

What does EE1st change in the process and discussions?

The introduction of the Energy Efficiency First principle has changed not only priorities but also the way conversations are held with local authorities and other stakeholders. What was once seen as an abstract European concept became more concrete once we linked it to the Irish planning process and to existing county projects. In this sense, the Regio1st framework was useful, but it needed to be adapted to local realities and to the stage of each county's planning. When it was presented as a tool to strengthen what was already underway rather than as an extra layer of obligations, engagement improved markedly.

The regional workshops played a central role in this shift. At the beginning, it was difficult to secure commitment, as many local authorities considered EE1st distant from their immediate responsibilities. Once we reframed the discussion around their climate action plans, housing projects, or mobility strategies, they began to see where EE1st could add value. Communication supports, maps, graphics, and simplified explanations of obligations and benefits, helped bridge knowledge gaps and made the principle tangible. In turn, this fostered exchanges across different county departments, such as planning, housing, and energy, which rarely interact in the same forum.

Overall, EE1st legitimised the place of energy efficiency in county-level planning discussions, bringing it closer to the status usually given to renewable energy or large infrastructure projects. It also highlighted the importance of cooperation across governance levels and of consistent access to data and methodologies. At the same time, one important obstacle remained: it was difficult to steer the conversation away from a compliance-only mindset. Many local authorities were reluctant to engage seriously without clear national guidance or obligations, which illustrates how the delayed translation of EU requirements into Irish law has slowed local uptake.

Contribution to Multilevel Climate and Energy Dialogue

Through the project, we created practical spaces for multilevel dialogue by bringing county councils, the regional assembly, and national actors together around EE1st. The framework provided a common structure to connect local initiatives with national strategies and European priorities. In this sense, our work did contribute to the spirit of Article 11 of the Governance Regulation, which calls for climate and energy dialogue across levels of government.

However, the process also revealed its limits. Because there is no formal requirement for councils to participate in such dialogue, involvement remains voluntary and uneven. Without stronger national guidance and legal recognition, the dialogue mechanisms we piloted risk remaining ad hoc rather than systemic.

What can EE1st change in the analysis / assessment: example of social CBA

Two different types of CBA can be conducted, namely:

Original CBA:

A cost-benefit analysis (CBA) is conducted to measure the benefits of a decision or taking action minus the costs associated with taking that action. CBA includes measurable financial metrics such as revenue or costs due to the decision to pursue a project. In this research, the term economically feasible or not feasible are also used to explain the results of the CBA analysis. The economic impacts are identified, and the evaluation is performed taking into consideration the impacts on the national economy. The analysis is based on changes in the market prices.

Social CBA:

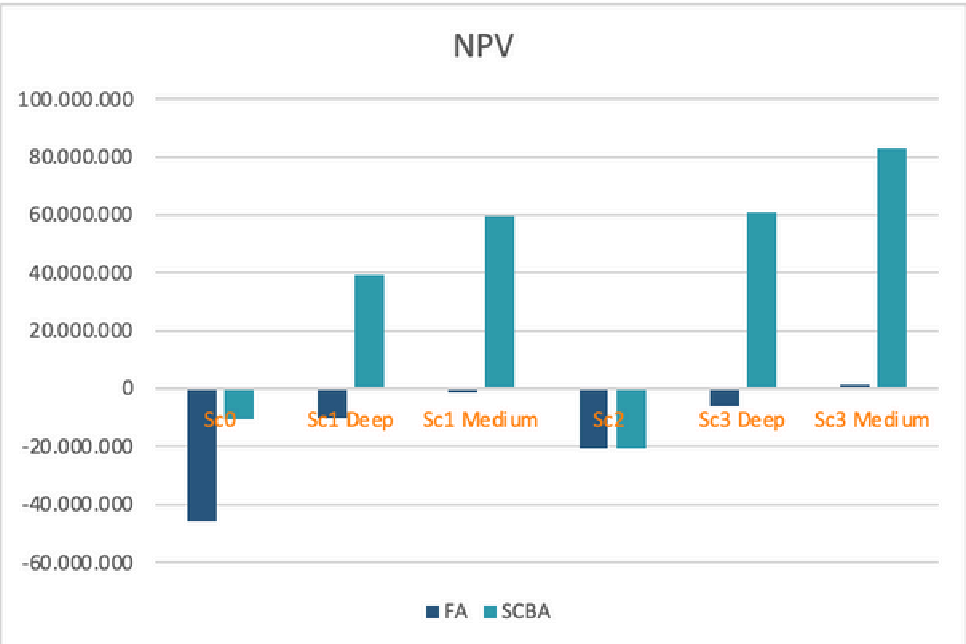
SCBA includes all the factors of CBA analysis. In addition to this, the environmental and social impacts are identified, and the evaluation is performed taking into consideration the impacts on the whole society. The analysis includes both the market prices and the external cost and benefits triggered by the examined investments.

The CBA aims to examine the social profitability of the examined energy efficiency projects, justifying the potential utilization of specific financial schemes (such as subsidies) in relation with the results of the financial analysis. The conduction of the financial analysis and the social CBA leads to the calculation of two different indicators, namely the financial Net Present Value (NPV) (or the financial Internal Rate of Return (IRR)) and the social NPV (or the social IRR respectively). Another considered metric is the Benefit-to-Cost Ratio (B/C Ratio).

Table 1: The results of financial and social NPVs and the decisions to move forward/to stop.

Potential result of calculations	Financial NPV	Social NPV	Conclusions	Next steps
1st	≥ 0	≥ 0	Economically and socially beneficial	Promoting these types of investments/ interventions
2nd	≤ 0	≥ 0	Economically not beneficial. However, socially important	Providing financial supports, e.g., subsidies, increasing municipality's equity share in the investment
3rd	≥ 0	≤ 0	Economically beneficial to invest on a project but not socially.	Penalty for the investors and imposing the incentives that distribute the economic benefits among different groups, such as taxes.
4th	≤ 0	≤ 0	Economically and socially not beneficial.	Stop the investments/interventions

Figure 1: Overview of B/C ratios per scenario in Southeastern Ireland.



In Southeastern Ireland, Scenario 3 with medium renovation yielded the best results, meaning the highest social NPV.

- Scenario 3 considers the realisation of nearly-zero energy buildings (NZEBs), meaning refurbishing the building envelope, implementing heat pumps, and installing photovoltaics.
- Medium renovation considers a renovation limited to window frames, doors and walls. This goes in line with the rhetoric that more costly interventions aiming at long-term improvements lead to the highest societal benefit.

Even though Southeastern Ireland presents no consumption of natural gas, one point in common with regions dependent on natural gas is that the implementation of NZEBs results in lower energy consumptions, higher utilisation of renewables, decreased energy costs, but also more health benefits, as heating oil is more polluting. The implementation of heat pumps alone does not provide high benefits due to the low prices of heating oil.

Investments in natural gas are not beneficial in this case due to lower price of heating oil and a low reduction of health harms compared to other fuels (as natural gas presents less harm compared to heating oil but still more than renewables). Even so this type of short-term cheap policy does indeed reach a high number of households. In fact, since no households present gas boilers, the implementation of the latter has a high outreach and low implementation costs.

What's next?

Implementing the Energy Efficiency First (EE1st) principle should not be seen as a one-off exercise but as an iterative process. County councils can begin with small, no-regret measures, such as public lighting upgrades or energy audits, and gradually build towards more integrated strategies. What matters most is continuity: starting somewhere, learning along the way, and improving as new tools and data become available.

Local authorities in the South-East have clearly expressed the need for ongoing guidance and accompaniment as they move into the next phases of their planning. The Regio1st framework has provided a useful starting point, but its true value should come from being applied repeatedly in successive planning cycles. This can also help to bridge the mismatch between project timelines and local authority plan revisions, ensuring that efficiency principles remain embedded even when formal plans are not immediately due for renewal.

Moving forward, several actions could strengthen EE1st integration across Ireland:

Provide structured advisory support: Local authorities should not be left to interpret European obligations on their own. Dedicated support, from energy agencies, CAROs, and national actors, can help translate EU requirements into practical planning guidance.

Promote quick wins while planning long-term: No-regret actions like retrofitting public buildings, street lighting upgrades, and small-scale renewables should be encouraged in parallel with long-term infrastructure and housing strategies. This keeps momentum high and demonstrates results.

Keep multilevel governance strong and live: Councils, regions, and national institutions should continue dialogue beyond the project setting, so that EE1st becomes a shared reference point rather than a project-limited experiment.

Keep on working to embed EE1st in development and climate action plans: SECAPs offer a natural entry point for operationalising EE1st. local authorities should be supported to explicitly integrate efficiency-first assessments (e.g. through cost-benefit analysis) into their climate and energy strategies.

Taken together, these steps would help make EE1st a living process in Ireland which will steadily raises ambition across counties and regions.

REGIO1ST

Regio1st raises awareness about the Energy Efficiency First principle (EE1st) among regional governments and their agencies and supports them to make related decisions in their planning.

Scan here to visit our Planning Framework:

www.fedarene.org/project/regio1st

#Regio1st

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