







# **Towards Peer-to-Peer (P2P) Energy Trading:**

A Policy Pathway for Ireland's Decentralised Energy Future

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# Towards Peer-to-Peer (P2P) Energy Trading: A Policy Pathway for Ireland's Decentralised Energy Future

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- Ireland's electricity system is undergoing a shift toward increased decentralisation, driven by rising consumer participation and distributed generation.
- Peer-to-peer (P2P) energy trading offers a new model where households and communities can directly exchange electricity, creating local and flexible energy systems.
- Current policies like Microgeneration Support Scheme (MSS) and Feed-in Tariff (FiT) are essential foundations, but lack the flexibility and structure to enable dynamic, community-based trading models.
- International case studies and domestic pilot projects show both the promise and barriers of P2P in practice.
- This paper outlines a phased policy roadmap to scale P2P trading in Ireland, starting with community energy, supporting early pilots, clarifying legal frameworks, and ensuring grid-aware design.

#### 1 INTRODUCTION

Ireland's electricity system is changing rapidly. The shift toward cleaner energy, along with new technologies and support schemes, is allowing more households and communities to generate their own electricity using renewable sources like solar panels. Consumers who both produce and consume electricity are referred to as **Prosumers** [1]. As more people install solar panels and take an active role in how they use and produce energy, the idea of a more localised and flexible energy system is becoming a reality. **Peer-to-peer (P2P) energy trading** [2] offers a route to this kind of flexible system.

This paper examines the policy, regulatory, and technical steps needed to enable P2P energy trading in Ireland, drawing on international case studies and offering a phased roadmap to support a more decentralised electricity system.

# 1.1 What is Peer-to-Peer (P2P) energy trading?

Peer-to-peer (P2P) energy trading is emerging as a promising model that allows prosumers

to sell excess electricity directly to nearby consumers, such as neighbours or local businesses, rather than relying entirely on the grid for exporting electricity. P2P trading could be thought of as part of an emerging sharing economy. The International Energy Agency (IEA) [3] recognised this shift early, creating a Global Observatory on P2P Trading in 2020 to explore its potential. Instead of relying solely on the main grid and receiving a standard **Feed-in Tariff (FiT)** from a network operator for excess microgeneration, prosumers can negotiate prices and trade energy locally. This model can increase efficiency for both consumers and prosumers because it supports a more flexible, decentralised, and participatory energy system.

P2P trading also **supports climate targets** by promoting the adoption and efficient use of local renewables, reducing reliance on fossil fuels, and **lowering greenhouse gas emissions**. Local balancing of supply and demand minimises curtailment of renewables and maximises their utilisation, which is essential for national decarbonization goals.

The potential benefits of this model are threefold. First, it encourages higher deployment

### **Glossary of Terms**

**Community Energy:** Locally led energy projects involving collective ownership or shared benefits among residents, institutions, or businesses.

**Data Protection (GDPR):** The General Data Protection Regulation, a legal framework that governs the collection and processing of personal data in the EU.

**Distribution System Operator (DSO):** A company responsible for operating, maintaining, and developing the distribution grid. In Ireland, the DSO is ESB Networks.

**Dynamic Pricing:** Electricity pricing that changes in real time or according to time-of-use, based on supply-demand balance.

**Feed-in Tariff (FiT):** A policy mechanism providing fixed payments to small-scale renewable energy producers for electricity exported to the grid.

**Low-voltage (LV) distribution network:** The part of the electricity grid that delivers power from substations to end users.

Microgeneration Support Scheme (MSS): Ireland's current scheme that supports small-scale renewable energy generation and offers compensation for exported electricity.

**Prosumer:** Electricity customers who both produce and consume electricity.

**Smart Meter:** A digital electricity meter that records energy use in real time and supports advanced functions such as time-of-use pricing.

**Supplier:** A licensed entity responsible for selling electricity to consumers and handling billing.

**Time-of-Use Tariffs:** Pricing structure where electricity rates vary depending on the time of day, encouraging consumption during off-peak periods.

**Virtual Power Plant:** A system that connects and manages many small energy sources to act like one large power plant.

of renewable electricity as prosumers can get a better price than the FiT rate, and consumers without renewables can benefit from renewables in the community through lower electricity prices than the retail rate. This, in turn, can help Ireland make the energy transition more inclusive and move closer to its climate targets. Second, a P2P platform essentially aggregates many distributed generation sources into a single 'virtual power plant' that can then be called on to provide flexibility to the main grid, for example to manage congestion or to maintain system frequency. Third, P2P trading can establish more localised price signals that reflect community-level electricity generation and consumption. However, questions in relation to P2P about fairness, regulation and market design must also be carefully considered.

Quantitatively, projects such as Quartierstrom in Switzerland [4] have shown that P2P trading can reduce household energy costs by 7-10% for consumers, while prosumers receive higher payments for exported energy compared to standard feed-in tariffs. Similarly, the Australian P2P marketplace Power **Ledger** has achieved average annual savings of \$424 for users, with solar owners doubling the revenue they would receive from traditional power sales. In rural and underserved areas, P2P platforms like **SOLshare** in Bangladesh have made electricity more reliable and accessible for communities previously without access to the grid, supporting both energy affordability and social inclusion. Qualitatively, participants in pilot projects such as Quartierstrom and those studied in the UK have reported valuing the opportunity to support neighbours, contribute to local sustainability, and have greater control over their energy choices. Together, these benefits demonstrate that P2P energy trading can support citizen engagement, improve energy affordability, reduce energy poverty, and help Ireland meet its national climate targets.

### 1.2 Current Landscape in Ireland

Introducing P2P trading in Ireland calls for a measured and carefully planned approach, grounded in the country's evolving energy and regulatory environment. Ireland already has important support schemes in place such as the Microgeneration Support Scheme (MSS) and associated FiTs that are playing a key role in encouraging the uptake of residential solar power.

Over the past decade, Ireland has taken steady steps to support small-scale renewable energy. While the Renewable Energy Feed-in Tariff (REFIT) supported non-domestic generators such as wind and biomass, domestic solar producers did not have access to a formal FiT. The REFIT scheme provided a guaranteed, fixed payment for electricity exported to the grid, offering financial certainty to early adopters and helping lay the foundation for renewable energy uptake in Ireland. In 2021, this was followed by the MSS, which introduced the Clean Export Guarantee (CEG). This marked a key milestone in enabling households to participate in clean energy generation. These schemes have been important, but also possess certain limitations. For example, under the CEG scheme, electricity suppliers pay prosumers for any excess electricity from microgeneration exported back to the grid, but there is no regulatory cap or floor on this payment rate, which means the value of payments can vary significantly between suppliers. Crucially, neither the earlier REFIT scheme nor the current CEG enabled prosumers to trade electricity directly within their community. P2P schemes have the potential to provide prosumers with an additional export option for excess generation, providing competition to the supplierdetermined FiT.

# 1.3 Visualising P2P potential with timeof-use pricing

Figure 1 and Table 1 highlight the pricing gap between what consumers pay and what prosumers receive under Electric Ireland's current Standard Smart Tariff (a time-of-use price plan). From 08:00 onwards, the retail price exceeds the FiT, creating a window where prosumers and consumers could both benefit from local energy trading. A negotiated P2P price between these two values (as shown in the shaded area) would offer consumers

a cheaper alternative to the retail rate and provide prosumers with a better return than the fixed FiT. During the night (00:00–08:00), the retail price falls just below the FiT, removing the scope for beneficial P2P trading in this example. If a flat-rate retail price was applied above the FiT throughout the day, the potential for P2P trading would be constant.

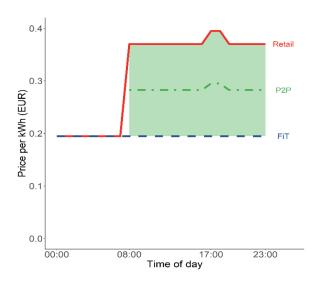


Figure 1: Potential gains to prosumers and consumers from P2P trading under a day/night/peak retail price plan

Table 1: Day/night/peak retail price plan

Time	Retail Price (€/kWh)	
Night (00:00-08:00)	0.1946	
Day (08:00-17:00)	0.3703	
Peak (17:00–19:00)	0.3950	
Evening (19:00-00:00)	0.3703	
Feed-in Tariff (FiT)	0.1950	

As technology evolves and smart meters are rolled out across the country through the National Smart Metering Programme, new possibilities are emerging. In particular, it is expected that by mid-2026, dynamic pricing will allow consumers to avail of electricity prices that vary throughout the day in response to supply and demand. This will allow consumers who are flexible in when they use electricity to benefit from lower prices when the cost of producing electricity is lower. It

may also increase the scope for more interactive models like P2P trading, where households could sell their excess energy directly to neighbours whenever the dynamic retail price exceeds the FiT.

Therefore, this paper suggests a step-by-step policy pathway: improving what we already have, while gradually creating space for more local, peer-based energy exchange. This paper proposes such a roadmap considering national and international case studies and offering practical recommendations to transition from current mechanisms to a community integrated, future-ready P2P trading ecosystem.

#### **2 CASE STUDIES**

Ireland has already taken early steps to explore the P2P concept through pilot projects such as the ESB Networks Dingle electrification project and the CityXChange initiative. However, both encountered significant challenges. In Dingle [5], supplier engagement was limited due to unclear commercial incentives, and the lack of real-time pricing made it difficult to simulate dynamic trading conditions. In CityXChange, technical issues with building infrastructure such as shared metering and wiring constraints prevented the implementation of P2P energy exchange, and the project instead pivoted to focus on electric vehicle charging. In both cases, legal uncertainty around billing, platform operation, and settlement made it difficult to integrate trials within the existing electricity market. Meanwhile, the EnerPort project explored blockchain based P2P trading mechanisms at the research level, but it has not yet been deployed in a real-world community setting. These experiences highlight the need for clearer market design, supplier roles, and technical standards before P2P can scale in Ireland and underline the importance of a phased, policy-driven transition.

As Ireland considers how to evolve from existing support schemes toward more flexible, community-oriented energy models, there is much to learn from other countries that have already begun experimenting with P2P trading

and local energy markets [6]. These international examples (outlined below) show that strong policy design, supportive regulations, and meaningful community involvement are critical for success.

### 2.1 EPIU initiative project (Spain)

As part of the EU-funded Energy Poverty Intelligence Unit (EPIU) initiative in Spain, a public school was equipped with rooftop solar panels, enabling it to generate clean electricity not only for its own consumption but also to share surplus energy with nearby low-income households. The project demonstrated how hybrid P2P arrangements between public institutions and residential users can serve social goals while enhancing local energy resilience. The initiative was made possible through supportive Spanish legislation enabling citizen energy communities, dynamic pricing, and flexible metering schemes. It also fostered high community engagement and transparency, with real-time energy tracking and participation incentives. For Ireland, this model illustrates how publicly owned buildings such as schools or community centres can become anchors for early-stage P2P pilots. Embedding such projects within Ireland's growing network of energy communities could help strengthen local networks and build social acceptance for wider P2P integration.

# 2.2 InterFlex Project (Europe)

The InterFlex project, funded by the **European** Union's Horizon 2020 programme, tested how local energy sharing and flexibility services could work in practice across six sites in Europe. Instead of seeing P2P energy trading as something separate from the grid, the project focused on how electricity network operators known as distribution system operators (DSOs) can help manage and support these local exchanges. It used technologies like **smart** meters, home batteries, electric vehicles, and energy apps to show how households could share energy in a way that still protects the network from overload. One key idea was that energy sharing should be responsive to local grid conditions, for example, trading could

be encouraged or limited depending on how much capacity was available. This project showed that with the right tools and clear rules, **P2P trading can be safely integrated into how the grid operates**. For Ireland, the DSO (ESB Networks), could play an active role in enabling local energy trading, especially in community energy schemes or rural areas, helping to balance the benefits of local flexibility with the need for reliable grid operation.

### 2.3 CleanwattsOS Project (Portugal)

CleanwattsOS [7] is a digital platform developed in Portugal that enables P2P energy sharing within local communities. Unlike government led or research-based pilots, this is a commercial solution offered "as-a-service," meaning communities, buildings, or businesses can subscribe to it to manage their own energy exchanges. The platform uses real-time data from smart meters to track how much energy is generated and consumed by each participant, allowing households to share excess solar energy directly with their neighbours or common facilities. It also handles billing, settlement, and data reporting, making it easier for users to understand and manage their energy usage. Cleanwatts has worked closely with Portugal's enabling regulatory framework, which supports energy communities and recognises local energy sharing as part of national climate goals. The platform is already active in dozens of communities and offers a blueprint for how digital services can support both residential and commercial participants in energy sharing. If Ireland builds clear rules for community trading and offers guidance on standards for data handling and billing, commercial platforms could step in to support P2P models at scale especially in housing associations, apartment blocks, or mixed-use neighbourhoods.

### 2.4 NRG2peers Project (Europe)

The Horizon 2020 funded NRG2peers project [8] piloted in the Netherlands, Spain, and Sweden portrays an advanced approach to community energy engagement. Central to the model was a **real time digital twin**: A live vir-

tual replica of local energy systems that integrates smart meter data. Customers and planners could see in-app how household energy generation, consumption, and battery use flowed across their neighbourhood, helping them visualise system bottlenecks and experiment with different consumption behaviours before physically implementing them. Alongside this, gamification features such as energy-saving challenges, progress badges, and community leaderboards encouraged sustained participation. Early results show significant increases in user interaction and awareness, with many communities reaching over 70% engagement in gamified tasks. The project also invested in upskilling and mentoring community members through workshops, training, and peer support, ensuring participants could confidently use digital tools and adopt new energy behaviours. This focus on education and coaching was key to achieving high levels of sustained engagement and digital inclusion across diverse communities. By combining technical transparency with these motivational design, NRG2peers offers a compelling model for Ireland.

#### 3 GAPS AND ENABLERS

Enabling factors for P2P trading include distributed generation, the advancement of already digital energy management systems, through more integrated, real-time, and userfacing tools, and a facilitative regulatory framework. On the first of these, distributed generation, for example with domestic solar panel installations, is rapidly increasing in Ireland, expanding the potential scope for P2P trading. At present, while Ireland has successfully transposed the EU Renewable Energy Directive (RED II) [9] into national law, most recently through the European Union (Renewable Energy) Regulations 2022, which legally define and enable P2P energy trading, there remain significant policy and technical gaps that hinder the scaling of P2P markets. In addition, regulatory frameworks for grid access, tariffs, and licensing requirements need further clarification and adaptation to fully accommodate P2P participants. Work by the

Commission for Regulation of Utilities (CRU) to develop a Smart Meter Data Access Code highlights the need for clear rules on data sharing and consent, but these are not yet finalised. Ongoing challenges include the need for robust consumer protection mechanisms such as transparent pricing, data privacy, and dispute resolution, as well as the effective integration of P2P platforms with existing energy markets. Studies such as Clean energy for EU islands have identified additional legal and regulatory barriers for the clean energy transition on Irish islands, further emphasizing the need for adaptable policies and clear frameworks to support P2P energy trading.

Data privacy laws like GDPR are essential to protect consumers but without secure, standardised access pathways for electricity consumption data, third-party services like P2P apps cannot function effectively. From a market design perspective, the designing of P2P-generated revenues remains unclear. Furthermore, electricity suppliers lack a clear commercial role or incentive in enabling P2P transactions, especially since these models may challenge their existing revenue streams or customer relationships.

Another core challenge lies in the limited visibility and controllability of the **low-voltage (LV) distribution network**. Without granular data on grid hosting capacity or tools for realtime monitoring, the increased complexity of localised energy trading could risk network congestion or reliability issues, particularly in areas with high renewable generation. This lack of operational transparency makes it difficult for innovators and communities to plan, launch, or scale P2P trading initiatives.

The role of **private wires** (direct connections between peers) in enabling P2P energy trading has been a topic of discussion. This setup has been used in some commercial and industrial settings. For example, Vietnam have implemented private wire networks to directly connect renewable energy generators with nearby large consumers, enabling real-time exchange of electricity without relying on the main distribution network. However, building and maintaining private wires can be expensive and complex, making them less practical

for smaller communities or residential areas. There are also wider concerns that, if used too broadly, private wires could lead to the development of separate energy networks dominated by large users, which may not benefit the wider system. In contrast, the Local Virtual Private Network (LVPN) project in North Wales, UK, demonstrates how similar objectives can be achieved using existing public distribution networks. In this project, the local council explored virtual trading between solar PV plants and nearby public buildings, such as schools and offices, without constructing new infrastructure. Interestingly, 80% of the pilot projects for residential P2P energy trading in Europe have used the public power grid instead [10].

Despite early challenges, Ireland is experiencing a growing interest in local energy solutions. Sustainable Energy Communities (SECs), supported by the Sustainable Energy Authority of Ireland (SEAI) and ESB Networks, are playing a central role in this transition. These projects typically involve local residents, businesses, and institutions working together to reduce energy use, increase renewable generation, and share benefits. SECs often focus on shared infrastructure like solar panels, battery storage, or energy-efficient upgrades with collective ownership or benefitsharing models. As of 2024, over 800 SECs have been registered across Ireland. SECs and P2P trading follow different models: one being more centralised and community-led, the other often driven by individual prosumers or a coordinating entity, but the two approaches can complement one another. In fact, SECs offer a natural testbed for future P2P trading models. With existing organisational structures, local trust, and growing technical capacity, energy communities like SECs can help pilot, de-risk, and demonstrate the benefits of peer-based trading before broader national rollout.

Ireland's **rollout of smart meters** is laying the groundwork for a more flexible electricity system. These meters are supporting new ways of pricing and using electricity, like charging different rates depending on the time of day such as the day / night / peak price plan de-

Table 2: Phased roadmap for transitioning from current support schemes

Responsible Entity	Short-term Actions (2025–2027)	Medium-term Actions (2027–2030)	Long-term Actions (Beyond 2030)
ESB Networks (DSO)	<ul> <li>Support smart meter integration</li> <li>Provide communities with access to consumption data to enable participation in P2P by providing transparency</li> </ul>	<ul> <li>Support trials of local sharing in energy communities</li> <li>Improve visibility of local grid capacity</li> </ul>	<ul> <li>Integrate P2P trading into distribution network operations</li> <li>Facilitate real-time electricity balancing at the local level</li> </ul>
SEAI (Energy Authority)	<ul> <li>Expand awareness and participation in MSS</li> <li>Continue to support community energy schemes</li> </ul>	<ul> <li>Fund pilot projects that simulate energy sharing and local P2P trading within local energy communities</li> </ul>	Support digital platforms for energy communities to scale up P2P models across Ireland
CRU (Regulator)	Complete the implementation of the Smart Meter Data Access Code	<ul> <li>Establish a regulatory sandbox for local energy sharing</li> <li>Define supplier responsibilities in emerging P2P models</li> </ul>	Establish a full regulatory framework for P2P trading (licensing, billing, settlement, grid fees)
DCEE (Dept of Climate, Energy and the Environment)	<ul> <li>Develop a comprehensive Private Wires policy</li> <li>Create working groups to align smart metering, pricing tools, and community project support</li> </ul>	Work with other government departments and state agencies to ensure P2P models contribute to a just energy transition	Oversee legislative amendments enabling full P2P market participation
EirGrid (TSO)	Analyse the role of local P2P energy trading under various future grid scenarios	Coordinate with ESB Networks to assess impact of local P2P trading on national system planning	Establish contracts with P2P platforms for ancillary services to the transmission system
Joint Collaboration (CRU + SEAI + ESB + DECC + Supplier)		<ul> <li>Launch coordinated         P2P trial zones in         partnership with         established energy         communities</li> </ul>	<ul> <li>Roll out full-scale, regulated P2P projects based on multi-stakeholder evaluation</li> </ul>

picted in Figure 1. Increased adoption of such price plans could open up opportunities for more local and responsive energy sharing such as households trading electricity with each other. As new electricity price plans(such as dynamic pricing) become available in Ireland, it is also important to ensure that they maintain fairness and transparency. Clear communication of alternative price plans will be key to gaining public support for a more local, fair, and flexible electricity market.

**Blockchain technology** is increasingly being explored as a tool to support P2P energy trading by enabling secure, transparent, and automated transactions between participants without the need for a central intermediary [11]. It acts like a digital ledger where each energy exchange is recorded and verified in real time. This can help build trust, reduce administrative costs, and enable smart contracts that automate billing and settlement. However, challenges such as scalability, high energy consumption, regulatory uncertainty, and technical complexity remain important considerations for policymakers aiming to support the wider adoption of blockchainbased P2P energy trading.

Table 2 outlines a phased roadmap for transitioning from current support schemes like the MSS toward future-ready P2P energy trading, highlighting the key actions and responsibilities of various Irish energy stakeholders across the short, medium, and long term.

#### 4 RECOMMENDATIONS

# 4.1 Revise the MSS to explore dynamic pricing

Currently, the MSS offers a fixed payment for exports, which has encouraged participation but may not fully capture the value of renewable energy at different times or locations. Introducing dynamic pricing, where payments vary based on real-time grid needs and demand can allow prosumers to earn more when their generation is most valuable, while also supporting more efficient and flexible energy markets. By setting P2P trading prices within the range of existing feed-in tariffs and fixed

tariffs, customers can further reduce their electricity bills and prosumers can increase their revenues. To maximise benefits, energy bills and supplier apps should clearly display when and how much households are earning from their exports, helping all participants make informed choices and fully realise the advantages of P2P trading. To ensure these benefits are widely shared, targeted outreach, user-friendly onboarding, and peer mentoring should be provided to help new participants join. Additionally, establishing a standardised reporting framework where suppliers and platforms regularly publish anonymised data on participation, savings, and environmental impact will help the wider public and policymakers track how P2P trading are developing and delivering value across society.

# 4.2 Support energy sharing within Sustainable Energy Communities

Ireland already has strong interest in local energy projects. These community-led efforts, where neighbours or groups work together to install and use renewable energy, can act as the first step toward P2P trading. By allowing these communities to test local sharing models using existing rules, tools like shared meter data and internal billing, and digital platforms to track energy flows, participants can build experience and trust. This approach will help Ireland move forward without needing a full national P2P market right away giving time to learn what works across a diversity of community settings and to prepare for a broader rollout.

# 4.3 Involve electricity suppliers by creating fair business models

Previous P2P energy trials in Ireland struggled because electricity suppliers did not see a clear benefit to participating. For P2P trading to grow, suppliers need to be part of the picture. One way to do this is for prosumers to pay suppliers a small transaction fee, for example a percentage of the additional revenue generated by the community manager before distrbuting the revenue to other peers in the network. Another useful step would be to de-

velop new business models, such as supplierenabled P2P billing and DSO-supported trading incentives that bring value to both the DSOs and peers. These models can create a win-win: peers benefit from better energy prices and local sharing, while suppliers and DSOs remain central to a more dynamic, decentralised electricity system.

# 4.4 Improve secure data access while ensuring data protection

To support smarter, more local energy use, prosumers need to securely share their electricity generation, consumption, and export data with trusted third parties like community energy coordinators or P2P trading platforms. This process must be built on robust data protection standards and, once available, the forthcoming Smart Meter Data Access Code from the CRU. In the meantime, interim measures should be established to facilitate secure and GDPR-compliant data sharing. At the same time, electricity suppliers should offer more transparent and userfriendly billing tools so that prosumers can easily see how they are performing under various price plans.

# 4.5 Clarify the Legal and Market Rules for P2P Trading

Ireland lacks clear rules for how P2P energy trading would operate within the national electricity market. While SI 76/2022 transposes elements of the EU electricity market directive and defines frameworks for energy communities, many practical aspects of P2P trading remain undefined. Questions regarding billing, network charges, and the roles of DSOs and suppliers in facilitating peer transactions still needs to be discussed. Clear guidance and structured "safe space" pilots are needed to reduce regulatory uncertainty and enable innovation.

The recommendations outlined above present a spectrum of strategies to advance P2P energy trading in Ireland, each with its own benefits and challenges. For example, revising the MSS to incorporate dynamic pricing (recommendation a) is relatively

straightforward to implement within the existing framework and can deliver over 80% of the potential benefits quickly by incentivising generation during periods of high value when combined with storage. **Supporting Sustainable Energy Communities** (recommendation b) helps build local trust and engagement. In contrast, supplier business models (recommendation c) and legal frameworks (recommendation e) are essential for market integration but require more extensive regulatory changes, technical infrastructure, and stakeholder coordination. Secure data access (recommendation d) is foundational for enabling advanced P2P trading, ensuring transparency and consumer confidence while protecting privacy.

#### 5 CONCLUSION

Ireland stands at a pivotal moment in its energy transition, with P2P energy trading offering a promising pathway toward a more decentralised, flexible, and community-driven electricity system. Building on existing support schemes like the MSS and the Clean Export Guarantee, P2P trading can empower prosumers and consumers alike by enabling local energy exchanges that reflect real-time value and promote renewable integration. However, scaling P2P trading requires addressing critical policy, regulatory, and technical challenges [12] such as clarifying market rules, ensuring secure and accessible data sharing, involving electricity suppliers constructively, and enhancing grid visibility and management. This paper has proposed a phased, policy-led transition: starting with improvements to existing schemes such as MSS, building confidence through community energy initiatives, and gradually enabling the conditions for regulated P2P energy trading.

This shift includes revising payment schemes to incorporate dynamic pricing, supporting community energy pilots, developing fair business models for suppliers and DSOs, and investing in digital infrastructure and consumer protections. By embracing these steps, Ireland can unlock the full potential of P2P energy trading, accelerating its clean energy

goals while delivering tangible benefits to households, communities, and the wider electricity system.

Therefore, the recommendations presented above go beyond enabling P2P transactions. They offer a practical and inclusive roadmap for modernising Ireland's electricity market.

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