Ireland's trusted **energy advisor.**

Corporate PPAs in Ireland

Opportunities, risks and what to ask before you sign.

A practical guide for CFOs, Procurement Directors, Sustainability Officers and all corporate energy buyers in the Irish Single Electricity Market.

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Exemplar

10–15	~30%	1–3
Years — Typical term for a direct CPPA with a new asset	Average Irish onshore wind capacity factor used in asset sizing	Years — Typical term for sleeved CPPAs via a licensed supplier

Corporate Power Purchase Agreements are becoming an important tool for Irish businesses seeking long-term price certainty and credible renewable electricity claims. The opportunity is real. So are the risks, particularly when volume, timing and carbon accounting are not properly understood.

SECTION 1

The Irish SEM & the CPPA Opportunity

Ireland's Single Electricity Market operates as a gross mandatory pool, with generation above the relevant threshold dispatched centrally through the market. For corporate buyers, physical power delivery is handled at market level. That makes virtual or financial CPPAs the simpler operational structure for many Irish organisations. The CPPA sits as a financial layer on top of normal supply contracts, rather than requiring the buyer to manage physical delivery arrangements.

Three demand drivers are accelerating CPPA adoption in Ireland. First, the SEM has experienced significant wholesale price volatility in recent years, and procurement directors are looking for ways to reduce exposure to gas-linked electricity prices. Second, GHG Protocol Scope 2 reporting is creating greater scrutiny for corporates relying on grid electricity claims without verifiable renewable attribution. Third, the expiry of State support schemes, including REFIT and, in time, RESS, is pushing generators to seek private revenue certainty. That makes long-term CPPAs commercially attractive on both sides of the table.

A critical concept in CPPA structuring is additionality: whether the renewable asset your contract supports is *new* generation brought onto the system specifically for your contract, or existing generation that would have been built regardless. For sustainability-conscious buyers, additionality matters because only new assets represent a net increase in renewable capacity. Contracting against existing or already-supported generation may be less persuasive for organisations seeking to demonstrate additionality, particularly where claims are being reviewed by sustainability auditors, customers or third-party verifiers. The strength of the claim will depend on the contract, the asset, the Guarantees of Origin and the reporting framework being applied.

Direct CPPAs linked to new assets offer the strongest additionality argument. Sleeved CPPAs via licensed suppliers may or may not carry additionality, depending on the underlying asset buyers should ask explicitly if this is a requirement. The distinction between matching existing generation and enabling new capacity will only sharpen as corporate sustainability standards continue to evolve.

> Could a CPPA deliver more price certainty than my current fixed or flexible tariff and at what cost?

SECTION 2

Sleeved vs. Direct CPPAs

SLEEVED CPPA

In a sleeved CPPA, a licensed electricity supplier sits between the buyer and the renewable generator. The supplier manages all the complexity imbalance charges and settlement embedding a management fee into the agreed strike price or explicitly stating it. From the buyer's perspective, the arrangement looks and feels like a standard supply contract, but with a renewable backing.

Terms are typically 1–3 years, making them faster to execute and more flexible for organisations that are new to CPPAs or uncertain about their long-term load profile. The trade off is a higher unit cost than a longer term, as the supplier's margin and risk management costs are priced into the strike price.

- Lower structural complexity so faster to execute
- Supplier manages imbalance risk on your behalf
- 1–3 year terms offer greater flexibility
- **GO risk:** ensure Guarantees of Origin are cancelled in your name, not the supplier's

Best for: organisations new to CPPAs, or those needing flexibility and a shorter term commitment.

DIRECT / FINANCIAL CPPA (CFD)

A direct CPPA is a Contract for Difference struck directly between the buyer and the renewable asset owner, with no intermediary. The buyer agrees a strike price for electricity over the contract term. When the market price is below the strike, the buyer pays the difference to the generator; when the market price is above, the generator pays the buyer. This structure delivers genuine long-term price certainty.

Terms of 12–15 years are standard, often longer, reflecting the generator's need to secure revenue certainty over the asset's operating life. Unit costs are typically lower than sleeved arrangements, but the buyer bears imbalance risk directly which is where quarter-hourly modelling becomes vital.

- Lower long-term unit cost; maximum price certainty
- Linked to new or additional assets strongest additionality argument if required
- Buyer bears imbalance risk directly
- 12–15 year terms and longer require careful consumption profile analysis
- Index pricing and stepped pricing an option

Best for: large consumers with stable load profiles wanting maximum long-term certainty.

Term length and additionality are closely linked. Longer direct deals 12–15 years provide the revenue certainty that makes financing a new renewable asset viable. This is what drives additionality: without a long-term offtake agreement, the asset may not be built at all. Shorter sleeved deals, by contrast, often sit against generation that was already committed, weakening the additionality argument.

Asset sizing is where many buyers make their first significant error. It is tempting to contract for 100% of your annual consumption the numbers appear to balance perfectly at annual level. They do not balance at quarter-hourly level. Over contracting volume is precisely where sellback risk is created. A sized CPPA typically covers 35–50% of annual demand, leaving headroom to absorb generation timing mismatches.

> How much flexibility do I need, and what is the true cost of a short-term deal versus the commitment of going direct?

SECTION 3

Matching the Asset to Your Site

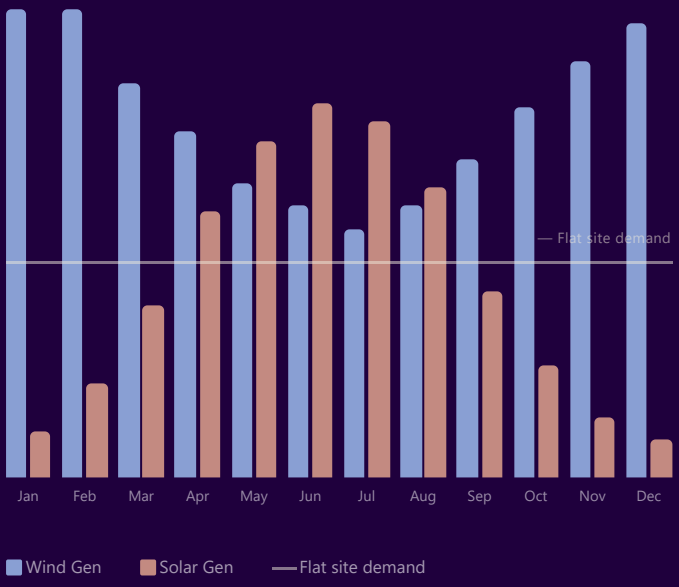
WIND ASSETS

Tend to produce more in **winter periods** and at **night**

SOLAR ASSETS

Tend to produce more in **summer periods** and during the **day**

Asset Size and Time Matching — Monthly Generation Profile



Indicative Irish capacity factors per asset tech relative scale, each series normalised to its own peak.

Not all sites are equally suited to a CPPA. The single most important factor before structure or asset type is whether your demand profile is **relatively flat**. A site with consistent electricity consumption across seasons, days of the week, and times of day leads to a better fit with an asset. The closer your demand tracks a flat line, the more predictable the generation to demand matching will be and the lower your shape risk.

Wind CPPAs are the natural hedge for organisations with higher winter demand or significant overnight consumption, shift workers, continuous processes, Hotels, cold-store operations. Irish onshore wind produces materially more in the October–March window, with capacity factors often exceeding 37% in December and January.

Solar CPPAs suit daytime-heavy operations with summer demand peaks; offices, logistics, food production. Solar generation is effectively zero before 7am and after 8pm and falls sharply outside the April–August window, making a solar CPPA a poor fit for overnight or winter-heavy loads.

Buyers with large or diverse portfolios may consider a **blended CPPA** contracting for both wind and solar assets. This can create a generation mix that more closely mirrors year-round demand and reduces sellback exposure across multiple periods. It is not always available, but where it is, it should be assessed carefully.

> Does my site's load peak in Winter or summer, at night or during the day and does the asset type I'm being offered actually reflect that?

SECTION 4

Sellback Risk The Blind Spot

Sellback risk, also called shape risk or profile risk, arises when a renewable asset generates electricity at a time your business does not need it. Under a CPPA CfD structure, if the market price at that moment is below your agreed strike price, you pay the difference on those surplus volumes. In practical terms, you may be exposed to a loss on electricity you cannot use, often during periods of high renewable generation and lower market prices.

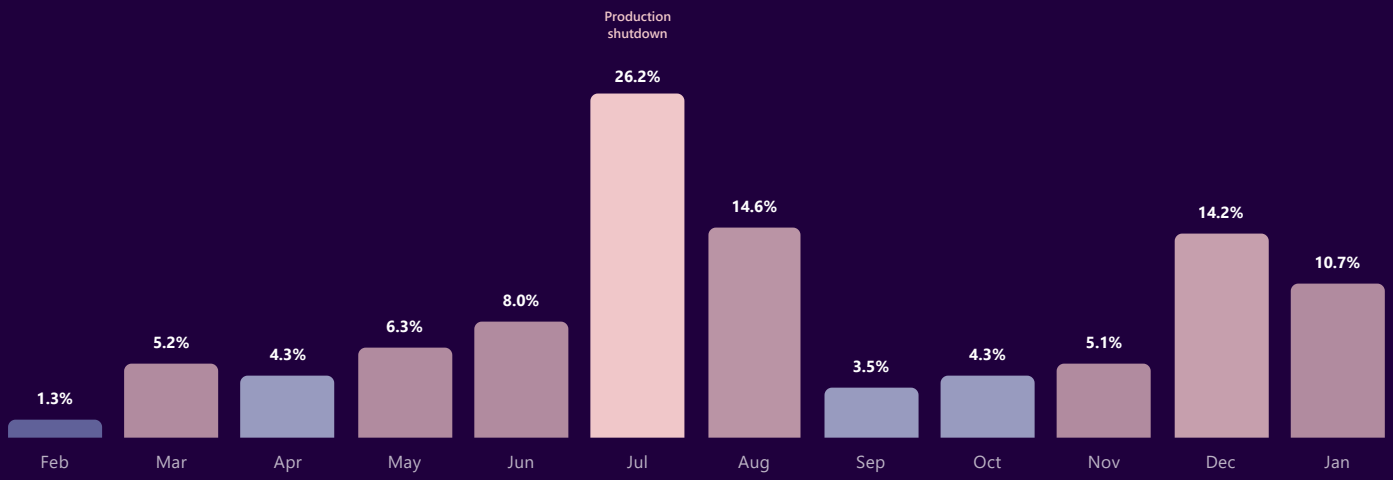
Buyers naturally focus on annual MWh totals: "will the asset cover X% of my annual consumption?" The answer at annual level can be perfectly satisfactory. Quarter-hourly timing mismatches, however, are invisible until modelled at that resolution. Irish wind generation is winter-heavy, but many industrial clients experience reduced December demand alongside planned summer shutdowns exactly when generation surpluses accumulate.

CASE STUDY CLIENT — ANONYMISED PORTFOLIO

- 19.5% of all contracted quarter-hourly periods carried surplus risk across the full year
- July's production shutdown alone drove 688 surplus quarter-hourly periods 26.2% of that month's generation
- December's elevated surplus (14.2%) reflects peak Irish wind capacity factors (37%) against reduced industrial activity
- Both patterns were entirely invisible until modelled at quarter-hourly resolution

MITIGATIONS

1. **Right-size contracted volume** reducing from 50% to 35%–40% of annual demand brought overall risk from HIGH to MODERATE in this portfolio
2. **"Planned Outage Period"** Client looked to shorten their outage periods to cover risk



Monthly surplus as % of generation — anonymised five-site industrial portfolio

Has my consumption profile been modelled at quarter-hourly resolution against the asset's generation profile including planned shutdowns and seasonal demand dips?

SECTION 5

Guarantees of Origin & Carbon Accounting

One Irish Guarantee of Origin (GO) represents 1 MWh of verified renewable electricity generation, tracked through the Association of Issuing Bodies (AIB) registry. GOs are the mechanism by which corporate buyers substantiate renewable electricity claims. When a GO is "cancelled," it is retired against a specific consumer's account confirming that one MWh of renewable generation has been assigned to that buyer and cannot be claimed by anyone else.

Under the GHG Protocol Scope 2 market-based method, GOs must be clearly assigned and cancelled for the end-user if they are to support that organisation's renewable electricity claim. If a supplier cancels GOs without explicit contractual assignment to your organisation, your claim may be invalid or open to challenge. This is one of the most common and consequential errors in CPPA contracting.

Why Irish GOs specifically? Irish GOs, issued through the AIB registry, provide geographic proximity and clear additionality. European GOs from distant markets, including Norwegian hydro, are increasingly being questioned where they are used to support Irish electricity consumption claims. For organisations making credible sustainability claims or pursuing third-party verified targets, geographic relevance, asset quality and contractual traceability all matter.

Double-counting risk is an emerging area of scrutiny in particular outside the EU. Where GOs are not explicitly ring-fenced to a named buyer, the same renewable attribute could be claimed by multiple parties. This is increasingly flagged by corporate sustainability auditors, SBTi verifiers, and regulators. The consequences are reputational as well as contractual a renewable energy claim that cannot withstand audit creates exactly the kind of greenwashing exposure that procurement directors are trying to avoid by signing a CPPA in the first place.

SCENARIO	GO CANCELLED IN	GHG PROTOCOL SCOPE 2	RISK
Direct CPPA with explicit GO assignment	Client's name	Market-based claim valid ✓	Low
Sleeved CPPA GO transfer contractually agreed	Client's name	Market-based claim valid ✓	Low
Sleeved CPPA no GO agreement in place	Supplier's name	Claim invalid or at least challengeable ✗	Medium
European GO only (non-Irish asset)	Varies	Additionality and locational offset questioned ✗	High

> Does my CPPA contract explicitly state that Guarantees of Origin are cancelled in my organisation's name and is that independently verifiable through the AIB registry?

SECTION 6

Your CPPA Checklist & Next Steps

- [ ] **Consumption profile modelled at quarter-hourly resolution?**
  Annual MWh totals are not sufficient. Quarter-hourly matching against the asset's generation profile is the only way to surface true sellback risk before committing to a strike price and volume.

- [ ] **Planned shutdowns and low-demand periods identified? What about future growth?**
  Production shutdowns, seasonal demand dips and weekend patterns must be mapped and noted. What cannot be measured cannot be protected against. Future growth could impact the hedge size required

- [ ] **GOs contractually assigned in your organisation's name?**
  Confirm the cancellation beneficiary in writing. Do not assume this is standard practice. Ask explicitly, and verify independently once the contract is live.

- [ ] **Surplus sellback risks agreed?**
  What happens to generation you cannot use? Normally its Spill at spot market pricing. Alternatives can be offered but are rare and complex

- [ ] **CPPA structure matched to your risk appetite?**
  Sleeved for flexibility and lower commitment; direct for maximum longer term price certainty. Neither is universally better the right choice depends on your consumption profile and strategic objectives.

Exemplar is an independent Irish energy market consultancy. We provide end-to-end CPPA advisory, from initial feasibility and quarter-hourly asset sizing assessments through to contract negotiation and ongoing management. Our role is to help you understand the opportunity, quantify the risk and make a decision you can stand over.

To discuss whether a CPPA is right for your organisation, contact Barry O'Leary, Commercial Director or any member of the Exemplar team.

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