Irish Solar Energy Association

Renewable Electricity Corporate Power Purchase Agreements

March 2021

Irish Solar Energy Association (ISEA)
Unit 616 Edenderry Business Campus
Edenderry Co. Offaly

www.irishsolarenergy.org

Consultation to Policy Options for Meeting Ireland's Targets of 15% of Demand to be met by Renewable Energy sources under CPPAs

Sustainable Energy Authority of Ireland

INTRODUCTION

Founded in 2013, the Irish Solar Energy Association's vision is of a fully decarbonised electricity system. Representing our 127 members, we are working to achieve at least 5GW of solar PV on the Irish electricity system by 2030, through: engagement of stakeholders; education of society and industry; and setting best practice.

We are delighted to have the opportunity to respond to the SEAI's consultation on policy options for meeting 15% of demand via CPPAs. In responding to the questions, we have assessed the interventions against our vision and the following criteria:

- Cost – impact on cost risk for renewable projects
- Time – potential effect on time risk for renewable projects
- Volume – probability of encouraging sufficient volume of projects to meet the renewable targets
- Transparency – whether transparency is increased or decreased for customers and the market

A particular priority for our association is any potential amendment of RESS. RESS was predicated on a viability gap concept where technologies required policy support to deploy at scale in the market. This viability gap, driven by costs in the Irish market, is a major contributing factor to slow deployment of CPPAs to date. Interfering with the volumes in RESS does not address the cost problem, stripping out costs does.

There are a range of policy levers available to encourage renewables and CPPAs. Interfering with a policy that is just beginning to deliver projects in the ground is ill advised. Undermining 55% of green electricity on the basis of a potential 15% will not decarbonise the Irish electricity supply.

The headline findings in our response include:

1. The fundamental issue is one of supply. Optimising grid and planning processes to reduce cost and timelines, will increase the supply of renewable projects for CPPAs
2. Interference with RESS to enable CPPAs risks undermining the entire renewables rollout and the nascent solar PV industry in particular. ISEA is strongly opposed to any curtailing of RESS which would undermine Government policy on renewables
3. Reducing private wire restrictions is a key enable for CPPAs and the wider industry, and those restriction should be lifted wholesale and without further delay
4. Two mechanisms that we would support for encouragement of CPPAs are:
    a. Greater transparency on fuel mix disclosure for LEUs on volumes originating from Irish renewable energy projects; and
    b. PSO credit to the LEU for volumes under CPPA.

QUESTIONS

1. What role should CPPAs have in delivering Ireland's renewable energy ambitions?

As noted in the Baringa report, when the 15% demand figure is compared to other markets, it is a substantial increase. No other European market is placing such a reliance upon CPPAs in relative terms. ISEA would view CPPAs as a potential route to market for solar projects where:

- System costs are reduced to enable solar PV compete on price with the market
- The supply of renewable projects is increased (i.e. they are being connected more efficiently and more quickly)
- There is greater transparency in the market on the green attributes of power

We would note that RESS is only beginning to deliver projects (the first RESS solar project broke ground recently) with a second auction due this year. ISEA strongly opposes any intervention that disrupts project delivery at such a key point in the evolution of the industry.

If policy does not address the three factors above, we expect the volume of solar PV CPPAs to be limited. CPPAs should be considered in addition to successful RESS auctions, not in lieu of them. RESS is predicted on the existence of a viability gap which is limiting the supply of CPPAs. Addressing the underlying costs will remove this viability gap over time and allow RESS support be reduced as CPPAs increase. Reducing RESS whilst this viability gap remains will simply result in less delivery of renewable projects, which runs completely contrary to national policy. Furthermore solar PV is a nascent industry in Ireland and unlike wind energy has not had the benefit of a prolonged stable support regime. It would be wholly unreasonable to withdraw support from the emerging solar sector when it is now clear that the least cost and lowest carbon 2030 system requires at least 5GW of solar PV[1]. It is essential that policy makers distinguish between the different renewable energy technologies in Ireland and develop policy accordingly.

2. What are your views on the shortlisted options in the Baringa Report?

In assessing the shortlisted options, we have reviewed them against the key metrics of: cost, time, volume and transparency. Below is our summary view. The traffic lights assess whether it improves, disimproves or has a neutral impact by each metric.

Intervention	Cost	Time	Volume	Transparency	Comment
Cap capacity eligible for RESS					Impairs ability to meet 2030 targets and specifically disadvantages solar PV
RESS tail auction					Impairs ability to meet 2030 targets

[1] https://irishsolarenergy.org/wp-content/uploads/2021/03/AFRY_ISEA_The-Value-of-Solar-in-Ireland_v300.pdf

Intervention	Cost	Time	Volume	Transparency	Comment
Leave price exposure in RESS (floor auction)					Impairs ability to meet 2030 targets
Reduce RESS auction frequency					Impairs ability to meet 2030 targets
Reduce RESS clearing volume					Impairs ability to meet 2030 targets
Fast-track grid connection offers for otherwise ready projects					Could make RESS prices less competitive as bidders receive less optimal grid connection. May invite legal challenge. Question feasibility of doing so
Facilitate direct wire for CPPAs					Direct wire should be facilitated for all renewable projects
Reduce business rates for CPPA projects					There is a potential inequity here. Rates should be reviewed on a holistic basis
Grid follows funding for CPPA projects					Complex and may not be consistent with EirGrid plans. May increase connection costs for others. May open risk of legal challenge
Tax incentives for CPPAs					As noted in response, taxation is not the barrier to CPPAs
RESS-specific PSO exemption for CPPAs					Favourable as may provide spur and reduce double payment
Close supplier-lite option					Negative transparency impacts
Mandate GoO / enhanced fuel mix disclosure among LEUs					Positive and aligns with trends on carbon accounting
Mandate LEUs to procure GoOs from Irish merchant RE					Positive, though a question on the volume of merchant GoOs
Mandate LEUs to procure CPPAs from Irish RE					Dependent on project throughput, thus better focus on grid costs and timelines
Mandate public sector to procure CPPAs from Irish RE					Public sector leadership positive, though a question on costs/budget versus a corporate
Mandate suppliers to procure GoOs from Irish merchant RE					Generally supportive, but a question on the volume of merchant GoOs
Offer price floor guarantee on CPPAs					May help reduce uncertainty but potentially costly
Offer 3rd party default guarantee on CPPAs					Could be very helpful to allowing smaller companies to participate or aggregate
Govt. provides community fund for CPPA projects					Doesn't generate a CPPA incentive, though may encourage popular support

Intervention	Cost	Time	Volume	Transparency	Comment
Mandate community principles for merchant projects					Would encourage community good practice across all projects, but question if generates CPPA incentive (Baringa list as "peripheral barrier")
Mandate CPPA projects to provide community fund					Question if generates incentive (Baringa list as "peripheral barrier")

3. Should CPPA's receive favourable treatment in terms of grid access or otherwise?

Grid capacity is the key constraint for all projects seeking to connect to the Irish electricity system. Prioritising grid capacity by possible route to market would be unusual, especially as the connection point is often specified years in advance of a project's route to market being agreed and the project financed.

Such a prioritisation is unlikely to impact favourably on the actual cost of the connection and would likely increase RESS clearing prices in the auction. RESS project developers target nodes with available capacity and size their plant so as to not trigger upgrades and incur high grid costs. If CPPAs jump the queue and take some or most of this capacity the resulting RESS asset will trigger upgrades, incur higher grid costs and ultimately bid a higher price in to the auction, which would not be favourable for consumers.

ISEA favours an approach whereby the maximum volume of the renewable capacity in the system can be accommodated on the network, which would require changes in connection and planning standards. The solution to these issues is a common solution across the industry rather than a carve out for a specific type of contract for output.

Policy should be directed at improving the connection regime for all participants rather than preferring projects planning to contract for the output in a specific way. Projects to be procured under cPPAs should not be given preferential access to grid capacity above those required for national targets.

We would also note that grid development should align with the EirGrid consultation: "Shaping Our Electricity Future"[2]

4. What priority should be given to the options?

As discussed throughout this paper, we would see the priority issue for CPPA projects and the renewables sector, as reducing the cost and timeline for renewable projects as it will enable the

[2] http://www.eirgridgroup.com/newsroom/shaping-our-electricity-f/index.xml

greatest throughput of projects to meet our decarbonisation goals. Within the interventions identified within the paper, the ones that best meet our criteria and facilitate CPPAs are:

- Enabling of direct wire arrangements, though it should be done for all renewable projects
- Enhancing transparency on fuel mix and GoOs

5. What are the potential impacts of the options upon project financing?

So long as the options do not impact upon project-level risk or interfere with the structure/design of RESS, ISEA would not expect a significant impact upon project financing from the proposed measures.

6. How can the supply of renewable projects for CPPA contracts be increased, and should RESS and CPPAs be more integrated or less integrated?

The challenge for LEUs in sourcing CPPAs is not ultimately a supply-side issue. There are potentially sufficient projects to meet requirements. ISEA has undertaken analysis of the pipeline of projects, and beyond the approximately 800MW awarded in RESS-1, there is a further 1.5-2GW of solar eligible for RESS-2. Figures from Solar Media point to a further 4.5-5GW of solar at various stages in the process, suggesting pipeline from solar alone of at least 7GW.

The Baringa report accompanying the consultation, and figures from Schneider Electric[3] show that Ireland is in the top tier from a price perspective across Europe. The corporates are procuring contracts in multiple markets.

If we can deliver the renewables pipeline faster and at a lower cost, then we create conditions amenable to CPPAs. Policy makers should focus on interventions to drive out those costs and reduce timelines across grid and planning.

In an analysis by KPMG[4] of the RESS-1 strike price and sensitivity to different inputs it found potential to reduce the €72.92/MWh strike price costs of the following order across the following areas:

- Grid - €8.80/MWh
- Planning - €14.40/MWh

Recent analysis undertaken by the association in response to a consultation for the Commission for Regulation of Utilities suggests that the grid number may be understated. The cost per MW for grid cost elements for a smaller scale solar project cost 93% more in Ireland than in the England and Northern Ireland.

ISEA strongly opposes any intervention within RESS to stimulate CPPAs. The overarching target is to decarbonise our electricity generation mix. As Figure 1 shows, to meet the 70% target, requires a near tripling of the volume of green power generated on the Irish system. In reality, to decarbonise

[3] State of the European Renewable Energy Market H2 2020: Market Overview and Key Trends for Corporate Buyers
[4] https://irishsolarenergy.org/wp-content/uploads/2021/02/KPMG-Report.pdf

this target needs to be seen as the floor to our ambitions, not the ceiling. In the Department of Environment Climate and Communications current consultation on the Climate Action Plan they are looking to increase the penetration.

Placing limits on the RESS route to market, is likely to only frustrate or impede the throughput of renewable projects. Any RESS intervention to facilitate CPPAs risks undermining the broader goal of delivering renewable electricity. Projects have lacked a route to market since the closure of REFIT in 2015.

Ultimately we need to produce three times the renewable power output in the next ten years, as we did in the past twenty. This requirement means maximising **all** renewable electricity generation options to the extent possible. Interfering with a process that has only just begun would undermine confidence in RESS and potentially fatally damage Ireland's journey to decarbonisation.

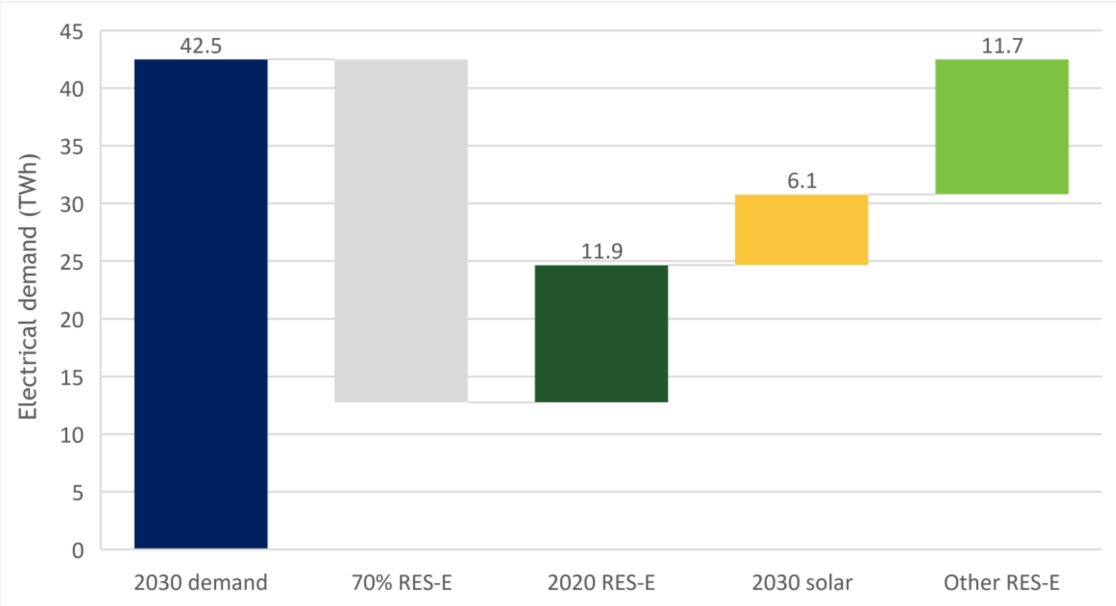

Figure 1: pathway to 70% RES-E

7. How can LEU demand for CPPAs be stimulated and translated into signed CPPA contracts?

We do not believe the corporate demand for CPPAs requires significant stimulation beyond the transparency measures. On the demand side, in 2019 – according to EirGrid- Ireland generated 30% of its power from renewables. The fuel mix on bills said the supply was 54%, suggesting that customer demand for green electricity far outstripped the physical supply, suggesting that we need more projects to be delivered.

As noted in other answers, removal of the elements that add cost and timelines to projects in Ireland, should manifest in a greater throughflow of projects at a price level to which the corporates are amenable. Allied with greater transparency measures (discussed in question 9) ISEA would be confident of more projects being delivered.

8. Are any of the shortlisted measures infeasible from your perspective? Why?

ISEA would view the following as infeasible:

- Interventions 1-6 (RESS changes): likely to undermine the wider renewables programme
- Intervention 11 (grid following CPPA funding): likely to negatively impact other stakeholders' connection costs raising spectre of legal challenge, present equity challenges, and be complex to implement

9. What role and application method could enhanced transparency have in the encouragement of CPPAs?

ISEA is strongly supportive of increased transparency around GoOs and fuel mix disclosure being used to enable greater take up of CPPAs (Intervention 23). For context, in 2019 Ireland imported 10.47TWh of GoOs[5], equivalent to 35.7% of total electricity demand that year. Given this volume of certificates in the market, it would suggest that changes here could enable scale in the market.

We would encourage alignment with the CDP standards of accounting for emissions. According to their updated standards, from the end of 2021 a market boundary criterion will apply meaning that to claim the carbon benefit on their electricity supply, companies must source renewable electricity within the boundary of the market in which they are consuming the electricity.

In effect, such alignment would achieve the effect of Intervention 24. In relation to that mechanism, a number of offtakers and project purchasers active in the market question whether there is sufficient volume of merchant GoOs or projects available in the market. The alignment with an internationally recognised standard may be more fruitful.

10. Do you have suggestions for alternative packages of complementary measures that would fulfil the policy objectives?

Further transparency measures could be enablers such as mandating or incentivising standards in excess of GoOs such as ecolabels like EKOenergy or Gold Standard. The greater the levels of transparency, the more secure Ireland Inc and the corporates can be in standing over claims around sustainability.

11. What distributional impacts should be taken into account when selecting and further developing shortlisted measures?

No comment

[5] https://www.cru.ie/wp-content/uploads/2020/12/CRU20109-Fuel-Mix-Disclosure-2019-Information-Paper.pdf

12. Is the scale of ambition of CPPAs realistic by 2030? i.e. a 15% Target of all electricity demand, or 85% of projected total large energy user consumption growth to 2030.

As noted above, the 15% figure is not achievable without substantial interventions. ISEA's position is that whatever the ultimate decision, it should not compromise the integrity of the processes to deliver other renewable projects. There is a principle of equity that needs to apply; it should not unduly disadvantage other potential routes to market. There is also a point of impact. If a proposed intervention harms the overall delivery of renewables, then ultimately its value must be questioned.

CONCLUSION

ISEA is supportive of proposals to support CPPAs that are: fair to other participants and society; and likely to enable widespread decarbonisation of electricity. Where a mechanism fails these tests, we deem it inappropriate.

Our priority comments are:

- A key enabler for CPPAs will be quickening the throughput of projects through planning and grid, and reducing the cost of their doing so
- Any mechanism to support CPPAs should not involve interference in the RESS auction process or design
- Fuel mix disclosure process should enable differentiation of power sourced from Irish renewables and imported GoOs
- The direct wire restrictions should be eased as a matter of urgency
- We are supportive of a PSO credit for corporates who contract a CPPA up to the value of the CPPA, so that they avoid double charging for the PSO

We would welcome the opportunity to engage around the content of our response.