KPMG

O-RESS Consultation

A Consultation on the application of indexation in the first Offshore RESS subsidy auction

—

June 2021

KPMG Sustainable Futures

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Important Notice

Important Notice

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There will usually be differences between forecast or projected and actual results, because events and circumstances frequently do not occur as expected or predicted, and those differences may be material.

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Executive summary

- KPMG conducted a Consultation of key stakeholders in the offshore wind industry in Ireland to obtain an overview of various stakeholders' perspectives on the application of indexation in the upcoming O-RESS auction design.
- There was a strong consistency of messaging received from Consultees that when given a choice between full, partial or zero indexation, the preference would be for full indexation followed by partial indexation.
- Whilst this response is perhaps unsurprising, the drivers for Consultees' preferences and the level of importance of indexation policy to them varied, with some, particularly Developers, regarding it as a lower priority issue, while funders saw it as a material consideration.
- Consultees expressed concerns in relation to indexation risks across the full project lifecycle, however the single most common period of concern was the potentially multi-year period between RESS bid and being able to obtain signed fixed price construction contracts. The recent example of the AO3 Dunkirk offshore wind auction in France was referenced as a particularly successful auction design in terms of addressing this risk period, whereby there was a higher proportion of indexation permitted between RESS and contract finalisation stage, and then a more modest partial indexation application during the operational stage *(see illustrative example of partial indexation, page 25).*
- Common reasons for Respondents' preferences for some form of indexation included:
    - the distinction between offshore wind and other technologies from an overall impact of indexation perspective (e.g. total quantum of capital investment, longer construction period, uncertain regulatory framework etc.) *(see Issue 1, page 14);*
    - expectation of a disproportionally high O-RESS tariff compared to other technologies and potentially impacting on a developer's community relations efforts *(see issue 2, page 15); and*
    - there being limited indexation financial hedging options available given the sheer scale of offshore *(see issue 3, page 17).*
- There was similarly a consensus that the absence of indexation would lead to projects having a lower debt capacity and a higher overall cost of capital *(see Issue 4, page 18)***.**
- Notwithstanding Respondents preference for indexation, it was notable than many Consultees, particularly from the Developer community, would have highlighted that indexation in and of itself was not the number one issue of concern for them in advance of the announcement of the O-RESS design and if zero indexation were to be applied, they would be able to manage this within their bid strategy.

Executive summary

Executive summary

- Developer Respondents would have emphasised other factors such as grid policy, tenor of support, and whether it was a Pay as Clear or Pay as Bid mechanism as being higher priority items in their minds. *(see issue 10, page 22).*
- In contrast, Financial Investor Consultees were more categoric in their view that the absence of indexation would preclude many Financial Investors such as Pension Funds and Insurance companies from investing in the Irish offshore wind industry as their objective is to match index linked liabilities with an index linked revenue stream *(see Issue 5, page 20).*
- A key point that was emphasised across all Respondents is that Ireland is operating in a competitive global market in terms of attracting capital investment into the sector. For instance one Developer Respondent is bidding into 12 separate auctions in 12 separate countries this year alone. There was a general concern that if Ireland was to have either a zero or conservative partial indexation policy it would risk making the market unattractive to new Financial Investors which would have a negative impact on the overall development of the industry in Ireland.
- In the absence of the application of indexation in the O-RESS design, given it is difficult to forecast inflation *(see Issue 9, page 22)* the government is going to force bidders to factor in a high inflation rate assumption. Based on recent history, low inflation is more likely than high inflation. Therefore, were a zero indexation policy adapted by government, a relativity high inflation cost will be automatically factored into the O-RESS tariff. If inflation remains low, consumers will have overpaid for their energy, with no mitigation avenues available.
- In contrast, if bidders underestimate inflation in their O-RESS bid, there is risk that the projects will become uneconomic and fail to reach COD. Indeed, a number of Financial Investors suggested concerns of this happening in an Irish context (see Issue 6, page 21).
- Despite these risks, some have argued that one rationale for zero indexation is to protect consumers from high inflation scenarios. A number of Consultees rejected this hypothesis, citing that unlike a low inflation scenario (where consumers will have no mitigation from overpaying), consumers / government will have natural protections whereby income / government revenues have an opportunity to increase through normal income inflator mechanisms (pay rises, increased tax revenues, providing some form of natural hedge. *(see Issue 7 and Issue 8, page 22).*
- These issues are outlined in further detail on the pages overleaf.

Introduction

Introduction

Scope of Work, Consultation participants

Scope of Work, Consultation participants	
Scope of Work	▪ KPMG was engaged by the Department of Environment, Climate and Communications ("DECC") to carry out a market consultation exercise in order to obtain a deeper understanding of the views of key market stakeholders in relation to the application of indexation in relation to the design of the upcoming Offshore Wind Renewable Energy Subsidy Scheme Auction ("O-RESS").
Consultation participants	▪ As part of the Consultation process, KPMG identified 10 different stakeholders. All parties that were approached accepted the invitation to participate in the Consultation. ▪ We sought to speak to stakeholders from a variety of perspectives to ensure a balanced perspective was obtained in relation to indexation policy for O-RESS. ▪ The Consultation participants ("the Consultees" or "the Respondents") were categorised into 4 distinct groups: ○ **Developers** – this group included a number of the major developers with existing offshore wind projects in Ireland. All Developer Consultees also had interests in international offshore wind projects and as a result provided insights and perspectives from experiences of auction designs in other markets to the Consultation. ○ **Financial Investors** – Separate to developers we spoke to selected leading Financial Investors in the European offshore wind market. The participants are active in various markets in Europe and would be regarded as likely investors in the Irish offshore wind market once the projects have reached Financial Close ("FC") and / or post Commercial Operation Date ("COD"). ○ **Bank Lenders** – We spoke to a number of international bank lenders with experience of providing finance to renewable energy projects. These included lenders who are in the process of providing debt financing to existing onshore wind assets in Ireland which have received a RESS-1 award, as well as having the experience of lending into the offshore wind industry internationally. ○ **Specialised Financial Advisers** – The Consultation included speaking with leading Specialised Financial Advisers in the market who have experience in both advising on offshore wind projects, as well as advising on the options in relation to hedging inflation in renewables and infrastructure projects in Ireland and internationally.

Introduction

Consultation process

Consultation process	
Consultation process	▪ All Consultees were approached with a request to participate in the Consultation process. A scope was sent to each participant along with a list of topics to allow them to prepare some thoughts in advance. ▪ Whilst the topics were used as a broad agenda, KPMG intentionally allowed each consultation to follow a natural conversational flow as opposed to using a rigid agenda, as this allowed us to understand the points of importance and emphasis for each respective Consultee, all of whom brought slightly different perspectives to their responses. ▪ This document seeks to provide a summary and analysis of the responses along with identifying the level of importance each category of Consultee attributed to each issue. ▪ The Consultees were notified at the outset that they would not be identified as part of this report and no quotes would be directly attributable to them. This helped to facilitate a comprehensive and open discussion as part of the Consultation process.

Introduction

Issues universally raised by Respondents

Indexation is more important for offshore wind vs. other technologies

Indexation linked subsidies increase debt capacity

Indexation linked subsidies reduce cost of capital

There are limited viable options for asset owners to hedge inflation

Without indexation inflation forecasts are included in bid prices

Ireland is competing with other countries for offshore wind investment

Issues raised by Consultees

Key issues raised by Consultees

Key issues raised by Consultees - Introduction

- The objective of the Consultation was to understand key market stakeholders' views in relation to the potential application of zero, partial or full indexation as a part of the upcoming O-RESS auction.
- Each Consultee addressed a variety of issues in their Consultation sessions.
- Where there was overlap in the key issues raised by Consultees, there was typically different levels of emphasis on each point depending on the particular experiences or perspectives of the Respondent.
- Within this section we have sought to:
    - Identify the key issues raised during the Consultation sessions;
    - Illustrate the level of importance the particular issue(s) had to the various categories of Consultees;
    - Include a high level KPMG commentary on the key issues raised; and
    - For selected key issues, we have provided illustrative examples to further explain a particular point.
- It is noted, that whilst KPMG sought to understand Respondents' perspectives with respect to zero, partial or full indexation, many Respondents often generalised between comparing zero indexation and full indexation. Those that did put emphasis on partial indexation regarded it as being closer in terms of impact to zero indexation, than full indexation.
- A limited number of Respondents in the Developer category did articulate a case for partial indexation based on international precedent. A summary of their case for the application of partial indexation in O-RESS is set out on page 22.

Summary of key issues raised by Consultees

Key issues raised by Consultees - Summary

		Developer	Financial Investor	Bank Lender	Financial Adviser	Page
1	A zero indexation policy is **not suitable for Offshore wind** due to the duration of the construction period	Priority	High Priority	High Priority	High Priority	**14**
2	Zero indexation will result in a **disproportionally high O-RESS price** compared to other technologies	High Priority	High Priority	Not raised	High Priority	**15**
3	There are limited options to **hedge inflation risk**, and those that are available are prohibitively expensive	Priority	High Priority	High Priority	High Priority	**17**
4	Zero or partial indexation **reduces a projects debt capacity** which will increase its overall cost of capital	Priority	High Priority	Notable	High Priority	**18**
5	Zero or partial indexation **reduces Irelands attractiveness to investors** compared to UK and EU markets	Priority	High Priority	Not raised	High Priority	**20**
6	Developers and Financial Investors' **inflation assumption perspectives are not aligned**	Important	High Priority	Important	Priority	**21**
7	The rationale for **no indexation in RESS 1 was not clearly understood** by the market	Notable	Important	High Priority	Important	**22**
8	It would be in the **State's interest to apply indexation** as it will match revenues with costs	Not raised	Important	High Priority	High Priority	**22**
9	It is **difficult to forecast inflation** which presents risks of aggressive speculative bids in O-RESS	High Priority	Important	High Priority	Important	**23**
10	There are **other policy issues that are equally if not more important** than indexation approach	High Priority	Important	Not raised	Not raised	**23**

Key: Not raised, Notable, Important, Priority, High Priority

KPMG

Summary of key issues raised by Consultees

1

A zero indexation policy is not suitable for Offshore wind due to the duration of the construction period

Respondent category	Importance of issue
Developer	Priority
Financial Investor	High Priority
Bank Lender	High Priority
Financial Adviser	High Priority

Key: Not raised · Notable · Important · Priority · High Priority

Summary of feedback from Consultees

- An overriding comment from Consultees was to firstly observe the distinction between offshore wind projects compared to projects based on other renewable technologies such as onshore wind or solar that participated in the RESS-1 auction.
- The longer construction period attributable to offshore wind projects, the absolute quantum of costs at risk during development and construction, the complexity of local and global supply chains, and the ongoing uncertainty regarding the consenting regime and subsequent planning make participation in the offshore RESS auction very different from a risk assessment perspective to the equivalent RESS-1 auctions.
- Implications of indexation on offshore wind financial models include:
  1) The overall period that an asset owner needs to forecast inflation for is longer (up to 20 years+, being 15 years of RESS period and 5 years+ of construction period); and
  2) A deeper analysis of the potential inflation impacts of construction period needs to be considered. This is because there is major exposure to the developer to key material inputs such as cost of steel and cost of turbines.

"The duration of construction is too long for no indexation to be applied, it will result in some developers making erroneous inflation assumptions which will result in Projects not being built"

– Leading European Financial Investor in Offshore Wind Projects

KPMG Comment

- From KPMG's experience of working with a variety of clients on renewable energy projects, inflation assumptions are commonly applied at 2% per annum on a flat basis in the absence of more credible alternative long term forecast tools being available.
- Where an offshore wind project has a lengthy construction period between RESS award and COD (e.g. 5 years+), and in the event that inflation levels exceed these 2% forecasts, it could threaten the financial viability of projects, and ultimately impact the prospects of a project reaching COD.
- There are a number of international examples where countries sought to design policy around protecting developers from inflation risk during the construction period - notably France and Belgium. A high level summary of these policies is set out on page 22.

Summary of key issues raised by Consultees

2

Zero indexation will result in a disproportionally high O-RESS price compared to other technologies

Respondent category	Importance of issue
Developer	High Priority
Financial Investor	High Priority
Bank Lender	Not raised
Financial Adviser	High Priority

Key: Not raised, Notable, Important, Priority, High Priority

Summary of feedback from Consultees

- Selected Consultees raised the issue that based on their current modelling, the required O-RESS strike price for selected offshore wind projects would be quite high relative to RESS-1 projects in the absence of inflation.
- For RESS-1 projects there was on average an extra 20% added to the required Day 1 strike price in a zero indexation scenario compared with a full indexation scenario. For O-RESS, this will be significantly higher, as the duration of the construction period makes the impact of inflation more pronounced.
- One Consultee noted that they believed all Relevant Projects would require a tariff of over €100 in a zero inflation scenario. The same Consultee questioned whether it was in the State and the offshore wind industry's interests to have a scenario where there was such a significant delta between the level of tariff's awarded to onshore wind and solar (averaging €74.08 / MWh in RESS-1).
- Several Consultees discussed the overall implications of having such a high day 1 O-RESS price for the industry on the basis that it may impact on public sentiment and support for offshore wind as well as perceptions from the consumer as to whether they are getting value for money.

"Having news headlines that offshore wind was receiving a support which was 30% higher than onshore wind and solar would not be helpful in terms of building community support for projects. The argument that it may be cheaper for the consumer in the long term depending on the inflation scenarios would not resonate with many key community stakeholders"

– Developer with an interest in a Relevant Project

KPMG Comment

- Whilst it is well understood that an asset owner would be required to submit a higher O-RESS bid price in the scenario where zero inflation is applied compared to a scenario where full or partial inflation is applied, we noted that a number of Consultees emphasised that based on their internal modelling the level of tariff required would be significantly greater than the unindexed tariff.
- Set out overleaf is a high level KPMG analysis of the potential delta of RESS prices required for offshore projects where full, partial or no indexation is applied to the tariff.

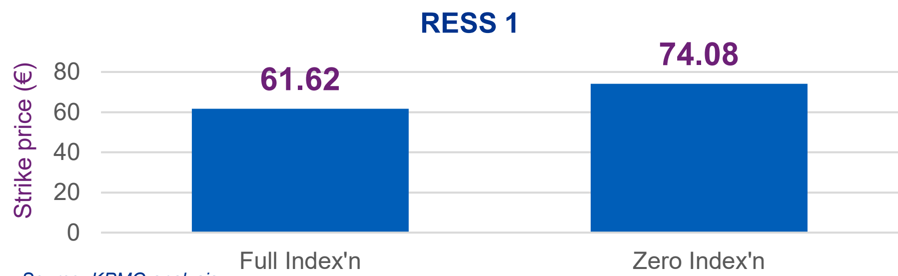
Summary of key issues raised by Consultees

2

No indexation will result in a disproportionally high O-RESS price compared to other technologies

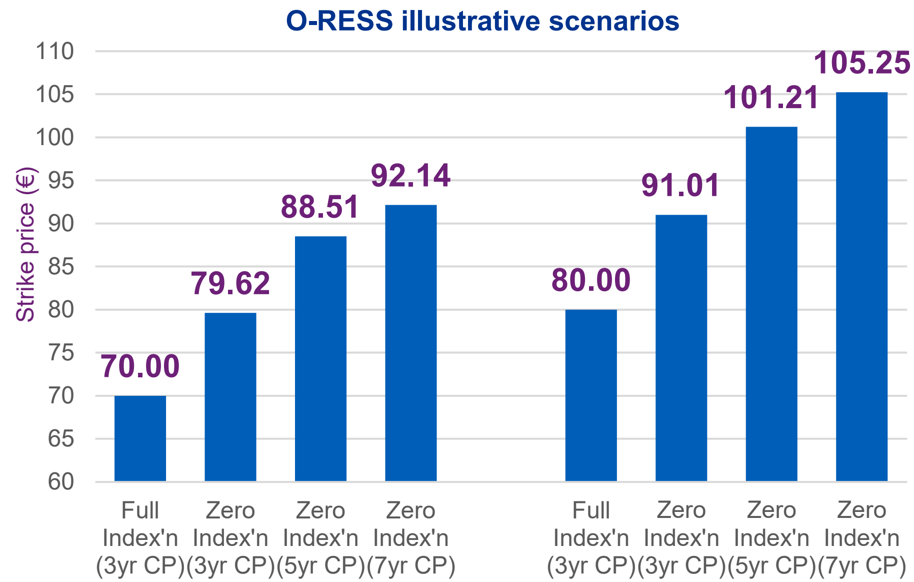
- Figure 1 illustrates the required day 1 strike price under a full indexation and zero indexation scenario for a RESS 1 project to deliver the same NPV of revenues over the RESS period.
  - This following assumptions have been applied:
    - A flat indexation assumption of 2% per annum;
    - A 24 month construction period ("CP") from bid date; and
    - A discount rate of 5.0%.
- Figure 2 illustrates the required day 1 strike prices under a full indexation scenario and zero indexation scenarios at different CP's to deliver the same NPV of revenues over the RESS period.
  - These projects apply the following assumptions:
    - A flat indexation assumption of 2% per annum;
    - Various CP's from bid date being 3 years, 5 years, and 7 years; and
    - A blended discount rate across construction and operational period of 7.5%.
- Figure 2 shows that a project that requires €70.00 under a full indexation scenario, requires €79.62, €88.51, or €92.14 in the scenario where the CP is 3 years, 5 years and 7 years respectively.
- Similarly a project that requires €80.00 under a full indexation scenario, requires €91.01, €101.21, or €105.25 in the scenario where the CP is 3 years, 5 years or 7 years respectively.
- This analysis would validate Respondents' view that no indexation will result in a disproportionally high O-RESS price compared to other technologies, particularly where a project has a long CP.

Figure 1



Source: KPMG analysis

Figure 2



Source: KPMG analysis

Summary of key issues raised by Consultees

3

There are limited options to hedge inflation risk, and those that are available are prohibitively expensive

Respondent category	Importance of issue
Developer	◕
Financial Investor	●
Bank Lender	●
Financial Adviser	●

Key: ○ Not raised ◔ Notable ◑ Important ◕ Priority ● High Priority

Summary of feedback from Consultees

- There was universal feedback from the Consultees that there is currently no active market for products that enables an asset owner to hedge against inflation risk as there are limited financial products available, and those that are available are currently prohibitively expensive.
- Whilst a Financial Adviser noted that they could identify three banks that would provide quotes, in reality the cost of the product was so high that it would not make commercial sense to purchase the product.
- As a result, the working assumption of Consultees is that inflation will remain unhedged and the entirety of the inflation risk will sit with the Project.
- This results in significant long term risk to the commercial viability of the Project over its lifetime and in the event of high levels of inflation during the construction period, threatens the viability of the projects actually getting built.

"Putting in place a hedge on inflation would be virtually impossible – there is no market for Irish inflation. Three banks may quote you a price but it is prohibitively expensive"

– Leading financial adviser to infrastructure projects

KPMG Comment

- There is an absence of a liquid market for products that allow for asset owners to hedge inflation.
- This will result in the entirety of the inflation risk sitting with the asset owners in the likely scenario where inflation remains unhedged.
- There was a common theme throughout the Financial Investor and Financial Adviser consultations that some Developers lacked the sophistication to predict and / or hedge against long term inflation which presented a number of risks such as the assets not being constructed or the inflation assumptions at bid time being unrealistic which will prejudice a projects options in relation to attracting a financial investor in the secondary market.

Summary of key issues raised by Consultees

4

Zero or Partial indexation reduces a Projects debt capacity which will increase its overall cost of capital

Respondent category	Importance of issue
Developer	◕
Financial Investor	●
Bank Lender	◔
Financial Adviser	●

Key: ○ Not raised ◔ Notable ◑ Important ◕ Priority ● High Priority

Summary of feedback from Consultees

- From a debt finance perspective, zero or partial indexation would result in lower levels of debt quantum on projects.
- Project Finance seeks to match costs with revenues. In a scenario where there is zero or partial indexation being applied to the revenue line, the lender will have to assume conservative inflation cases. The lender inflation assumptions are likely to be more conservative than the asset owner's inflation assumptions at the time of bidding into O-RESS. In addition the lender will apply more conservative DSCR ratios when sculpting debt. As a result a zero indexation or partial policy would significantly reduce a projects debt capacity.
- The actual cost of the debt amount lent to a project would not necessarily be different depending on the inflation policy. However a lower quantum of debt, results in a higher percentage of equity finance required by a project and as a result the overall cost of capital of a project will be higher.
- Some Lender Respondents noted that indexation during the CP is more important than over the lifetime of the operational period as there are no revenues during the CP, so no ability to match costs with revenues leaving the project exposed to inflation.

"A Lender's objective when providing Project Finance is to match revenues with costs. Where costs are inflating and revenues are not inflating, the Lenders will have to run more conservative modelling scenarios on the revenue line which will result in more restrictive DSCR ratios and lower debt quantum's"

- Leading financial adviser to infrastructure projects

KPMG Comment

- From our experience of modelling renewable energy projects' debt finance capacity, a key determinant is the assumptions applied by Lenders during the forecast period. In the absence of a third party forecast for an assumption, the Lender will use in-house assumptions which often result in a highly conservative case being applied.
- Where the revenue line is wholly or partially indexed, it will impact the debt sculpting applied by the Lender who will assume full indexation on the cost base and seek to ensure that there are adequate DSCR ratio coverage during each period in the debt case.
- A lower debt amount will result in more equity financing being required and an overall higher cost of capital for the project. We have considered some illustrative examples of a sample project's debt capacity overleaf.

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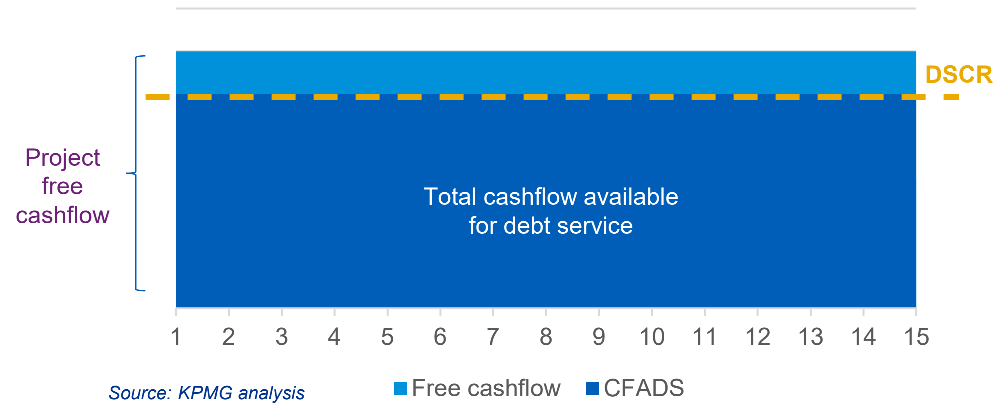
Summary of key issues raised by Consultees

4

Zero indexation reduces a Projects debt capacity and as a result will increase its overall cost of capital

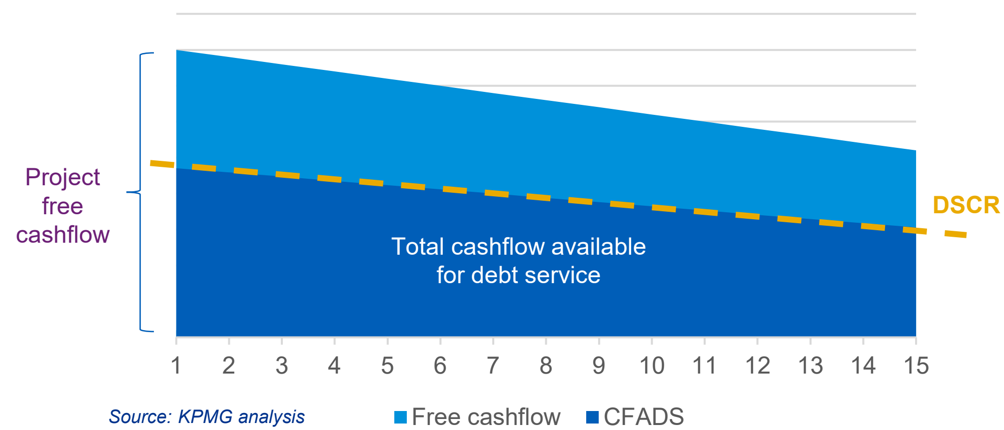
- In a scenario where full indexation is applied to the RESS price the profile of the free cashflow for an operational project is broadly flat over the RESS period (assumed to be 15 years). The indexed revenues will broadly match with the indexed costs.
- Where there is a component of costs that are non indexed, the free cashflow would be expected to increase as the total growth in revenue is greater than the total growth in cost.
- This consistency of forecast free cashflow enables bank lenders to have a degree of certainty and predictability over the cashflows of a project.
- As a result, when a bank lender is providing debt finance based on a "sculpted cashflow methodology", which is the most common method that lenders calculate the quantum of debt that they are willing to lend to a renewable energy project, the bank lender will be willing to apply a lower Debt Service Cover Ratio ("DSCR") when carrying out this sculpting calculation.
- The lower the level of DSCR, the higher the quantum of debt the bank will lend when applying the sculpted cashflow methodology.
- In a zero indexation scenario, the free cashflow will decrease over time.
- Given the Day 1 RESS price will be higher, there will be a greater amount of free cashflow in the earlier years, however given the uncertainty of the growth in the cost base relative to the revenue line due to indexation being unknown, banks will apply a higher DSCR requirement when applying the sculpted cashflow methodology to ensure they are protected against adverse indexation outcomes.
- A higher DSCR, will result in a lower quantum of debt being lent to a project. Whilst the cost of the debt may not differ in each scenario, where a projects capital structure has a lower proportion of debt, its overall weighted average cost of capital ("WACC") will be higher.

Cashflow profile - Full indexation scenario



Source: KPMG analysis

Cashflow profile - Zero indexation scenario



Source: KPMG analysis

Summary of key issues raised by Consultees

5

Zero or partial indexation reduces Irelands attractiveness to investors compared to UK and EU markets

Respondent category	Importance of issue
Developer	Priority
Financial Investor	High Priority
Bank Lender	Not raised
Financial Adviser	High Priority

Key: Not raised, Notable, Important, Priority, High Priority

Summary of feedback from Consultees

- In order to achieve its offshore wind targets, Ireland will need to attract significant amounts of capital investment to the sector. Whilst capital is plentiful in the financial markets at present, this could change over the coming years as interest rates rise and risk appetite changes. Ireland will be competing with the UK and other European countries for investment into its offshore wind industry in a potentially more competitive landscape.
- Pension Funds and Insurance Funds are some of the dominant investor classes in the secondary market for renewable energy projects. They are attracted to the index linked cashflows to offset their own index linked liabilities.
- Some leading Financial Investors / Asset Manager Respondents were clear that a large number of their Pension Fund investors would not be permitted to invest in the Irish offshore industry in the scenario where there was zero or partial inflation as their mandate is to invest in assets offering inflation linked revenues.
- All Developers, Financial Investors and Financial Advisor Respondents expressed concern about the ability of Ireland to attract sufficient capital into the industry where it had a less attractive regime compared to international comparators such as the UK.

"Based on our conversations with investors to date, many investors look at the Irish and UK market together. A fundamental difference in policy design such as zero indexation will make Irish projects less competitive in the secondary market compared to our UK counterparts"

– Developer with an interest in a Relevant Project

KPMG Comment

- Significant amounts of capital will be required to build out Ireland's offshore wind projects and the appetite for investing in the Irish offshore wind industry is strong at present.
- However there is significant "hope value" being attributed to projects, along with plentiful supply of capital in the markets generally which is bolstering market appetite.
- Ireland will be competing with the UK market (which has ambitions to develop 30GW of offshore wind projects over the coming decade), along with other European markets. Indeed one developer noted they are involved in 12 separate offshore auctions in different markets over the next 12 months and are constantly assessing the risk and attractiveness of those markets.
- Policy makers should be mindful not to design a policy based on the current market appetite and plentiful supply of capital and be conscious that this level of international investor appetite may become more competitive over the next decade.

Summary of key issues raised by Consultees

6

Developers and Financial Investors’ inflation assumption perspectives are not aligned

Respondent category	Importance of issue
Developer	Important
Financial Investor	High Priority
Bank Lender	Important
Financial Adviser	Priority

Key: Not raised, Notable, Important, Priority, High Priority

Summary of feedback from Consultees

- A number of Respondents raised the concern that in a scenario where there was zero or partial indexation applied, the parties that would be bidding into O-RESS would be the Developers whilst the ultimate long term owners of the assets would be the Financial Investors after a sell down event took place pre consenting or post COD for example.
- Indeed, some Developer Respondents also raised the concern that some of their counterpart Developers who were “less sophisticated” than them may bid in speculative indexation assumptions resulting in O-RESS awards at an unrealistic price that risk projects being built.
- Financial Investors raised the concern that the Developers take for granted that there will be a Financial Investor ready to invest or acquire a project in a secondary sale, however if the inflation assumptions taken by the Developer during the bid submission stage are too aggressive or proved to be incorrect during the CP, this may not necessarily be the case. A lack of Financial Investor appetite would then hamper projects ability to be constructed.

“The risk of Developer speculation in the auction is our biggest concern. Developers who aren’t as progressed or experienced as us bidding in unrealistic assumptions is a real risk. If the O-RESS design has a low criteria for delivery, there needs to be penalties for risk of non delivery”

– Developer with an interest in a Relevant Project and extensive experience in international projects

KPMG Comment

- We are currently seeing the initial signs of RESS-1 projects which may not be built on the basis that the developer assumptions applied when bidding into the auctions were too aggressive. This is particularly evident with a number of small scale solar projects where developers appear to have underestimated potential grid cost and not allowed for a sufficient “buffer” for the contingency. Significant panel pricing inflation in the last 6 – 9 months has eroded this contingency making a number of projects unviable.
- From an offshore wind perspective, the longer CP and scale of the projects means allowing sufficient contingency will be important and failure to do so will result in projects not reaching COD. We have seen numerous examples of this in other international markets.

Summary of key issues raised by Consultees

7 8

The rationale for no indexation in RESS 1 was not clearly understood by the market

Respondent category	Importance of issue
Developer	Notable
Financial Investor	Important
Bank Lender	High Priority
Financial Adviser	Important

Key: Not raised · Notable · Important · Priority · High Priority

"When I looked at RESS-1, I was extremely surprised when the subsidy regime was released with an unindexed basis, because on a consumer cost basis and a subsidy relative to Europe it looked so high as there was no indexation running through it. If it was applied to offshore, it would be even more dramatic"

– Leading European lender to renewable energy projects

Summary of feedback from Consultees

- Numerous Respondents commented that when the original RESS-1 design changed to apply a zero indexation policy it came as a surprise.
- Whilst Respondents understood that the objective was to lower the cost to the consumer, the rationale did not appear to be clearly understood.

KPMG Comment

- Policy makers may wish to consider this feedback when setting out the final O-RESS design from a communication perspective.

It would be in the State's interest to apply indexation as it will match revenues with costs

Respondent category	Importance of issue
Developer	Not raised
Financial Investor	Important
Bank Lender	High Priority
Financial Adviser	High Priority

Key: Not raised · Notable · Important · Priority · High Priority

"If I am the government, I want my cost base to match my revenues. The majority of my revenues (Exchequer returns) are linked to the performance of the economy which is impacted by inflation. I should match the cost of O-RESS to this income profile"

– Leading Financial Adviser

Summary of feedback from Consultees

- The Financial Adviser and Financial Investor Respondents communicated quite strong views that from the State's perspective it appeared sensible to them to match revenues with costs and therefore there should not be a reticence to compensate on a full indexation basis.
- Similarly where the cost is born by the consumer, in theory the increased costs associated with inflation should be matched by wage growth.

KPMG Comment

- This topic was not raised by any Developer or Bank Lender Consultee.

Summary of key issues raised by Consultees

9 10

It is difficult to forecast inflation which presents risks of aggressive speculative bids in O-RESS

Respondent category	Importance of issue
Developer	High Priority
Financial Investor	Important
Bank Lender	High Priority
Financial Adviser	Important

Key: Not raised, Notable, Important, Priority, High Priority

"It is difficult to obtain long term forecasts for inflation. This presents challenges in competitive auction as you are forced to take aggressive assumptions and are not protected if actual inflation goes against you"

– Developer with interest in a Relevant Project

Summary of feedback from Consultees

- It is difficult to obtain long term forecasts other than what is implied in the bond markets
- The majority of investors apply an ECB curve which is a commonly used and relatively basic assumption.
- Other more sophisticated developers / investors may have developed a more granular in house view based on particular cost inputs and deeper analysis on how project specific costs will change over time.
- Some Respondents raised concerns that they believed some project promoters would be awarded an O-RESS tariff on basic assumptions which would then lead to projects failing to reach COD.

There are other policy issues that are equally if not more important than indexation approach

Respondent category	Importance of issue
Developer	High Priority
Financial Investor	Important
Bank Lender	Not raised
Financial Adviser	Not raised

Key: Not raised, Notable, Important, Priority, High Priority

Summary of feedback from Consultees

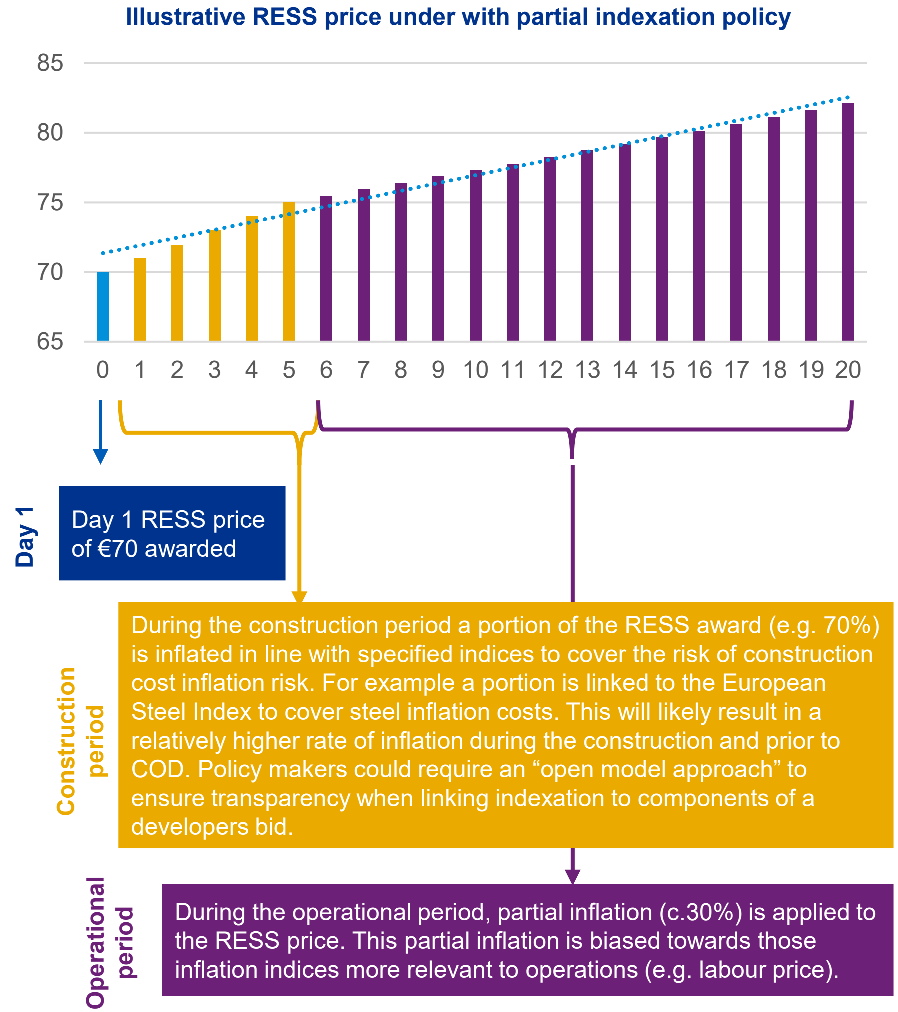
- Whilst not the focus of the consultation, selected Developer and Financial Investor Respondents nevertheless wished to highlight other policy levers that could have a "real" reduction in the price to the consumer, and which they regarded as more important to them than indexation policy namely:
  - **Length of subsidy support**: 15 years is towards the bottom end of the spectrum of support mechanisms globally. For example Denmark, France and US have 20 year tenors and Poland has proposed 25 years for 100k load hours. An extension would allow firm application of a lower cost of capital versus the comparative merchant operation, driving down cost to the consumer in real terms;
  - It was suggested that implementing a **Pay as Clear rather than Pay as Bid auction** and applying appropriately enforced eligibility rules, would potentially result in a more optimal total price for consumers; and
  - If the government's decision regarding offshore grid does confirm the need to transfer the offshore assets, it will be critical that the transfer provisions for **grid infrastructure** are reviewed to ensure that consumers benefit from the appropriate tax allowances associated with grid investment – and that this decision is taken before any bids are submitted.

Illustrative example of partial indexation

Illustrative example of partial indexation

Illustrative example of partial indexation

- Whilst full indexation was typically regarded as the preferred approach of Respondents. A number of Developer Respondents advocated selected international examples where a partial indexation approach has been successfully implemented.
- The preferred approach of Respondents in a partial indexation scenario was for policy to put a greater focus on covering the inflation risks attributed with the construction period.
- From bid award date through to such time where all required permits and consents have been obtained or up to COD, such partial indexation (e.g. 70% of RESS price) should be biased towards those inflation indices more relevant for construction costs (e.g. steel and copper, concrete, labour and producer prices); then from COD the application of partial inflation (e.g. 30% of RESS price) biased towards those inflation indices more relevant to operations (e.g. labour costs).
- This approach would allow the optimal balance in risk between the developer and the State, for example offering a degree of protection for the developer for events outside of their control (e.g. challenge/delays to consenting) whilst striking a fair and balanced position regarding price risk through the operational portion of the RESS.
- The most high profile example of this partial indexation mechanism being successfully rolled out was the “#AO3 Dunkirk” tender in France during 2018/19 where such an approach, whilst perceived as being complex at the outset, was implemented successfully and with relative ease after extensive engagement with auction participants.
- This partial indexation mechanism developed by the French government in partnership with industry for the Dunkirk tender provided a clear 2-step structure to the development and operational period.
- A simplified illustrative example is shown adjacent.



Glossary

Glossary of terms

BoP	Balance of Plant
CfD	Contracts for Difference
COD	Commercial Operation Date
CP	Construction Period
CPI	Consumer Price Index
DECC	Department of Environment, Climate and Communications
DSCR	Debt Service Cover Ratio
ECB	European Central Bank
FC	Financial Close
FIT	Feed in Tariff
LCF	Level Control Framework
LCOE	Levelized Cost of Electricity
NPV	Net Present Value
O-RESS	Offshore Renewable Energy Subsidy Scheme
O&M	Operations and Management
RO	Renewables Obligation
WACC	Weighted Average Cost of Capital

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