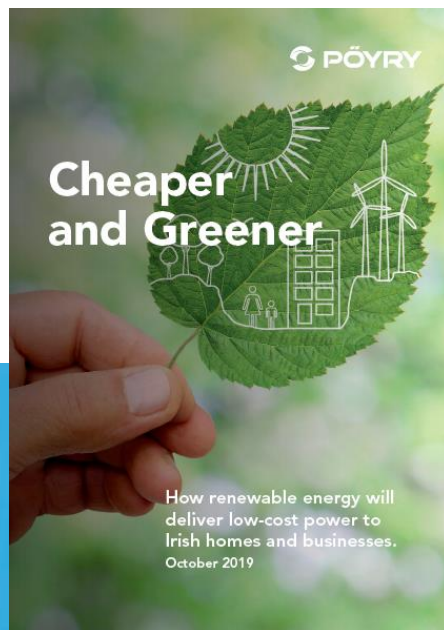




Cheaper & Greener

Dr. David Connolly
CEO, IWEA
6th December 2019



New Poyry analysis outlines value of 70% for Consumers & Corporates

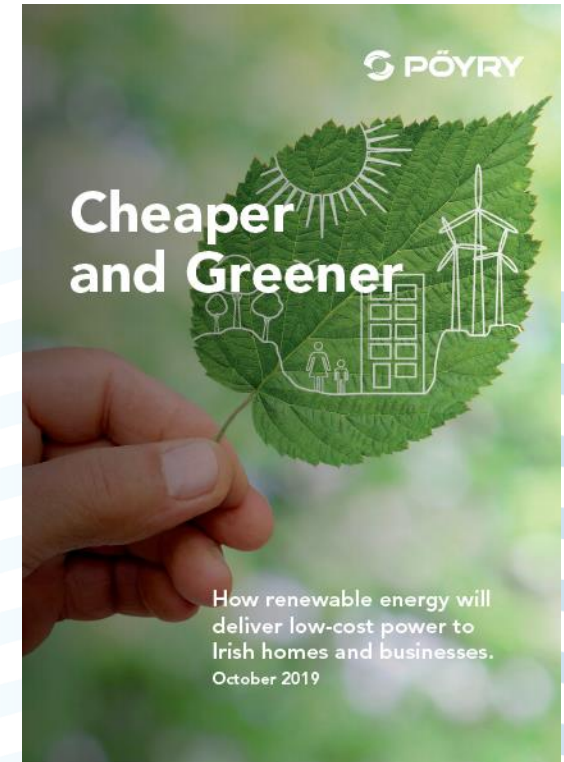
40by20
All Costs
€1/person/year



70by30
All Costs
€60/MWh = Breakeven



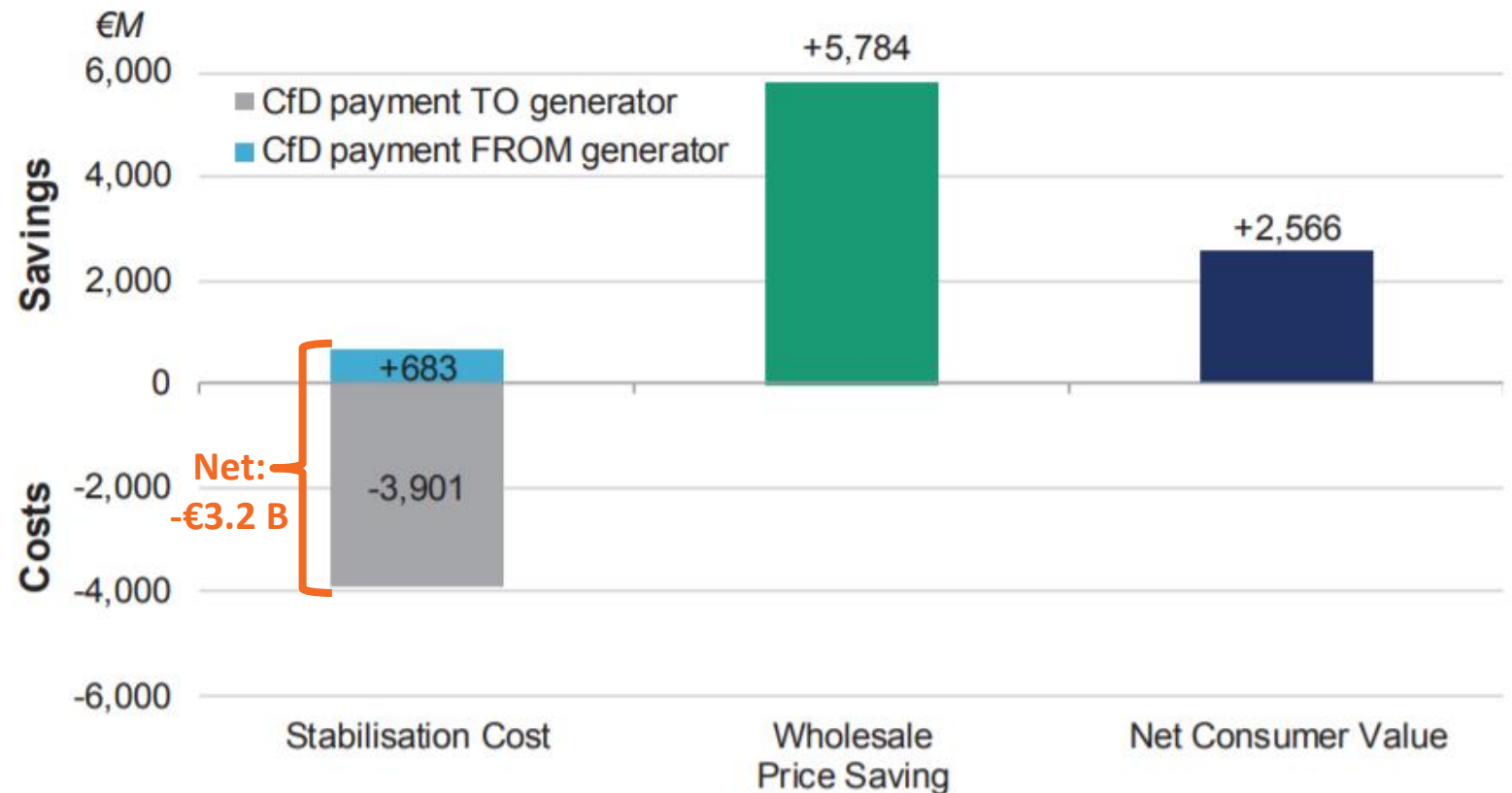
70by30
RESS/cPPA Costs Only (CfDs)
Lower Cost, but Must Share Saving



RESS offers the Consumer Excellent Value

- At €60/MWh average strike price:
- **The Consumer via the PSO is paying €3.2 billion**
- **BUT, the Consumer is saving €5.8 billion via reduced wholesale prices**
- So there is still a net saving to all consumers of ~€2.6 billion
- This is effectively the budget for other parts of electricity sector to facilitate more renewables e.g. grid, DS3+, etc.

Figure 2 – Net Consumer Value estimate assuming a CfD strike price of €60/MWh (€M, real 2017 money)

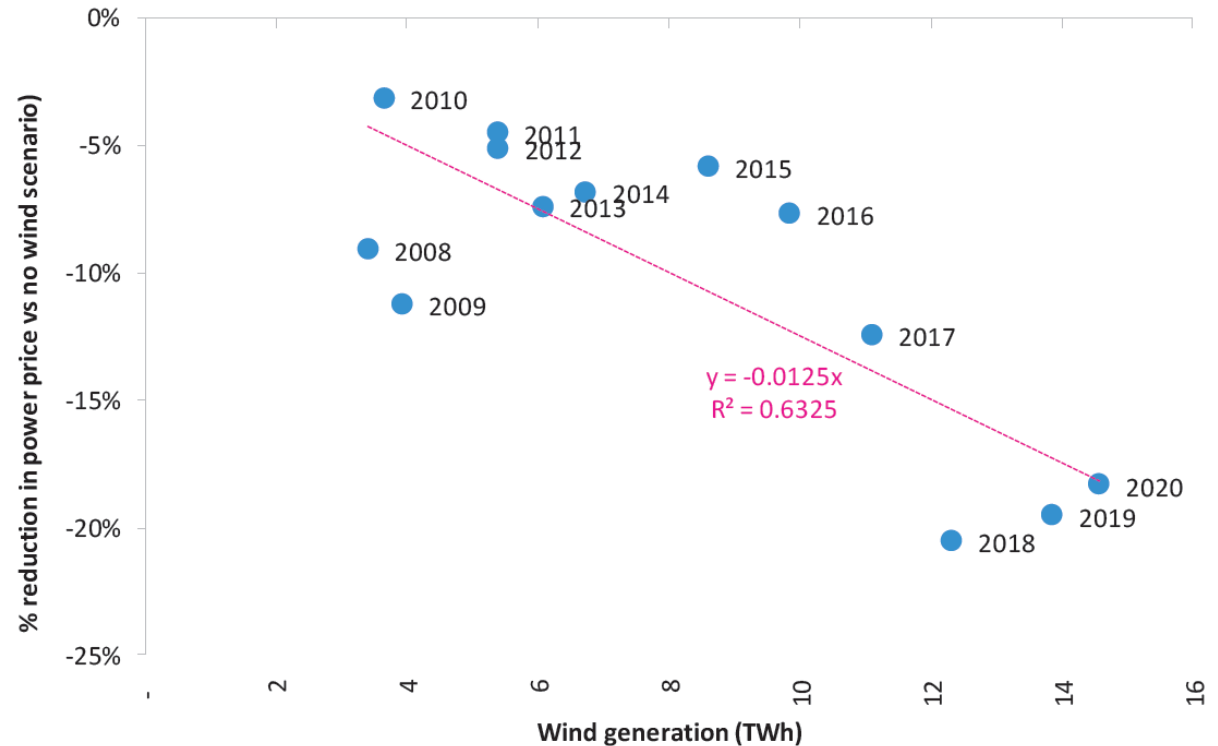


Note: A discount rate of 6% was used to calculate the net present value.

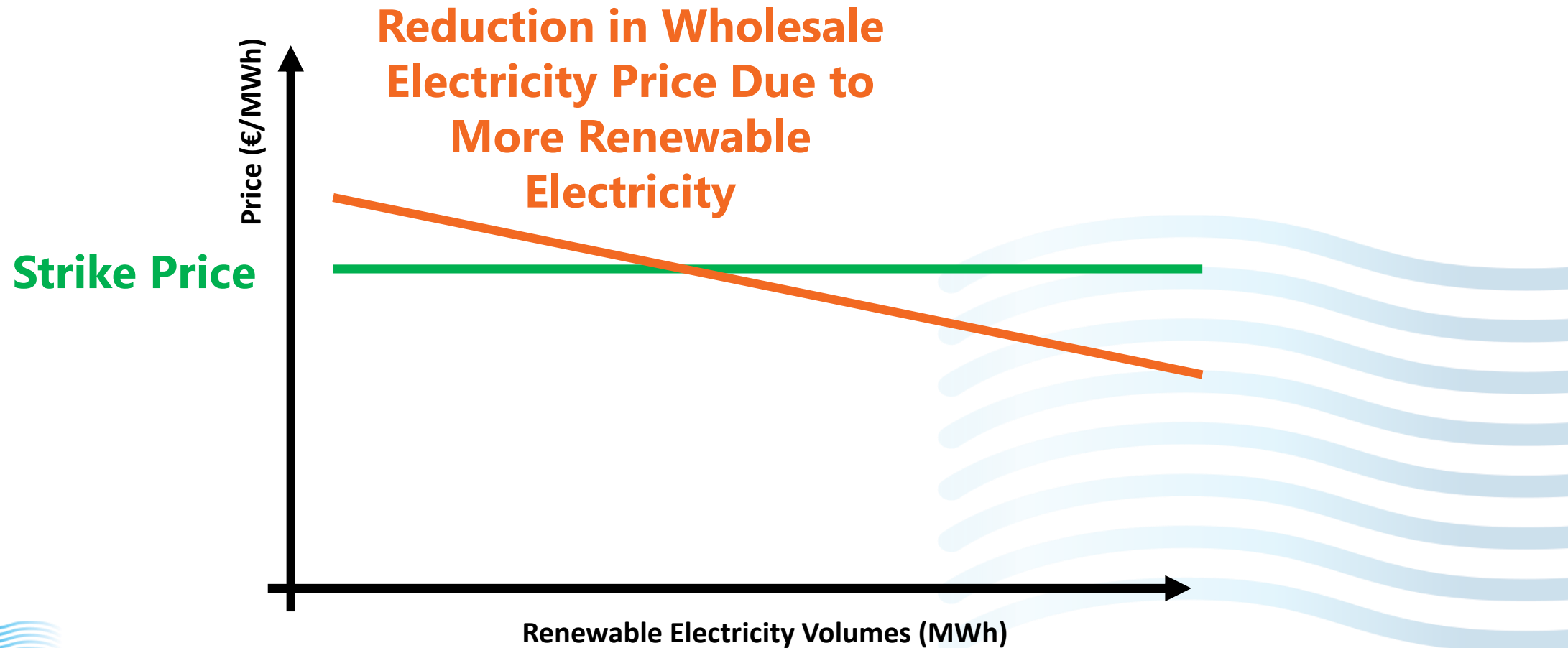
Wind Energy is Already Reducing the Wholesale Price by up to 20%: This will grow as more RES-E is added & the source of main savings



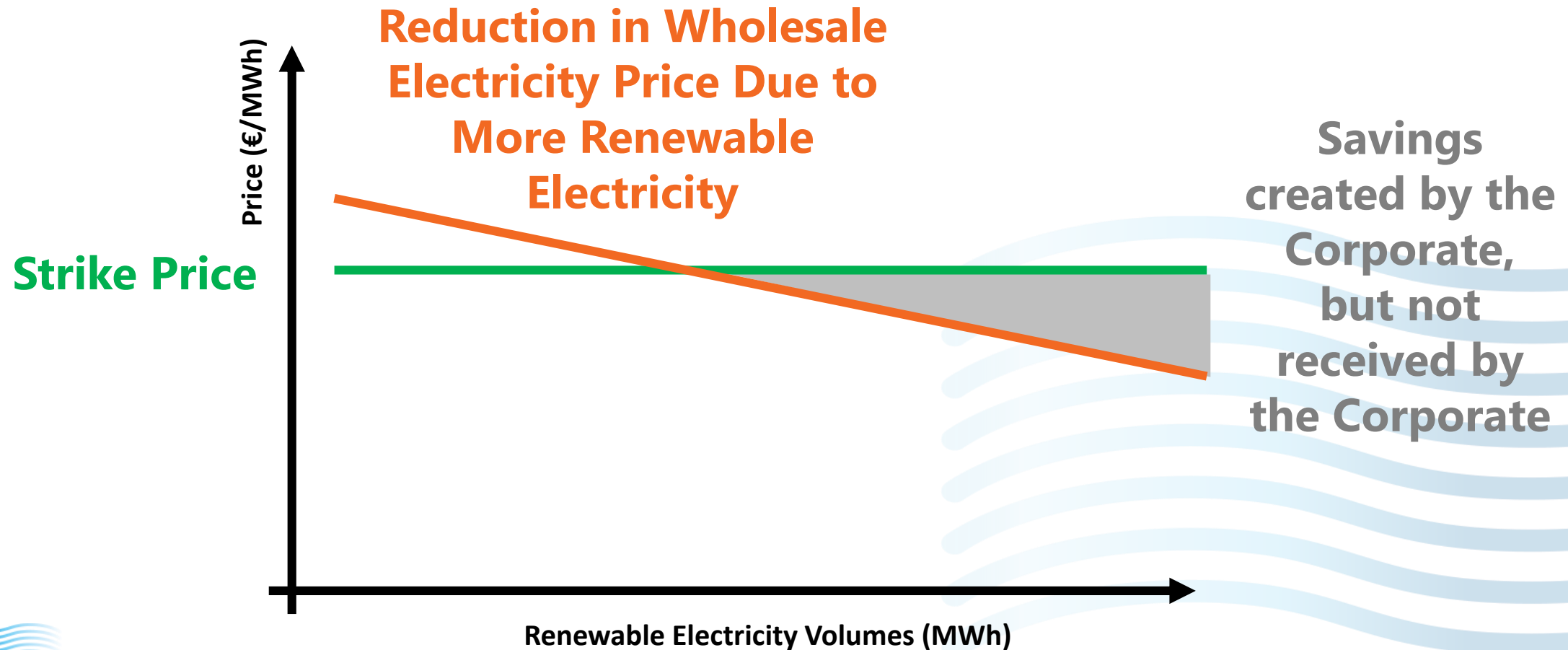
Figure 6 Wind generation and wholesale price reduction vs 'no wind' scenario



Can we Reduce the Strike Price to Make cPPAs more Attractive?



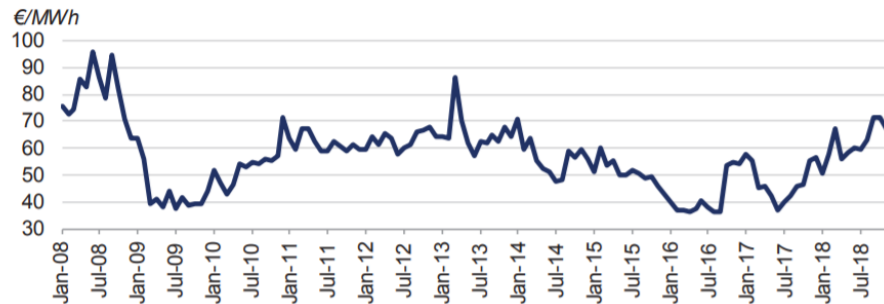
Can we Reduce the Strike Price to Make cPPAs more Attractive?



At present, we most likely need Corporates to put a Value on Other Benefits of a cPPA

- Putting a Value On: Hedging Against Price Uncertainty

Figure 13 – Annual average baseload electricity prices in the SEM (€/MWh, nominal money)



- Putting a Value On: Hedging Against Future Carbon Price Increases

The Department is proposing a shadow cost of carbon that will reach €32 a tonne by 2020, €100 a tonne by 2030 and €265 a tonne by 2050. The Committee welcomes this review and is of the opinion that all new public projects should immediately use this costing approach.³⁵



- Putting a Value On: Corporate Social Responsibility

Alternatively, we can improve the financial case for cPPAs by:

Passing on More of the Savings to LEUs/DCs



Reducing the Price of Wind Energy in Ireland



Ideas to a) Pass Some of the Savings to LEUs/DCs with cPPAs & b) Stimulate cPPA Market



Remove PSO levy for LEUs/DCs with a cPPA



Remove electricity tax for LEUs/DCs with a cPPA



Expand the 'Accelerated Capital Allowance for Energy Efficient Equipment' scheme to cPPAs



Require LEUs/DCs to purchase green power in Ireland?

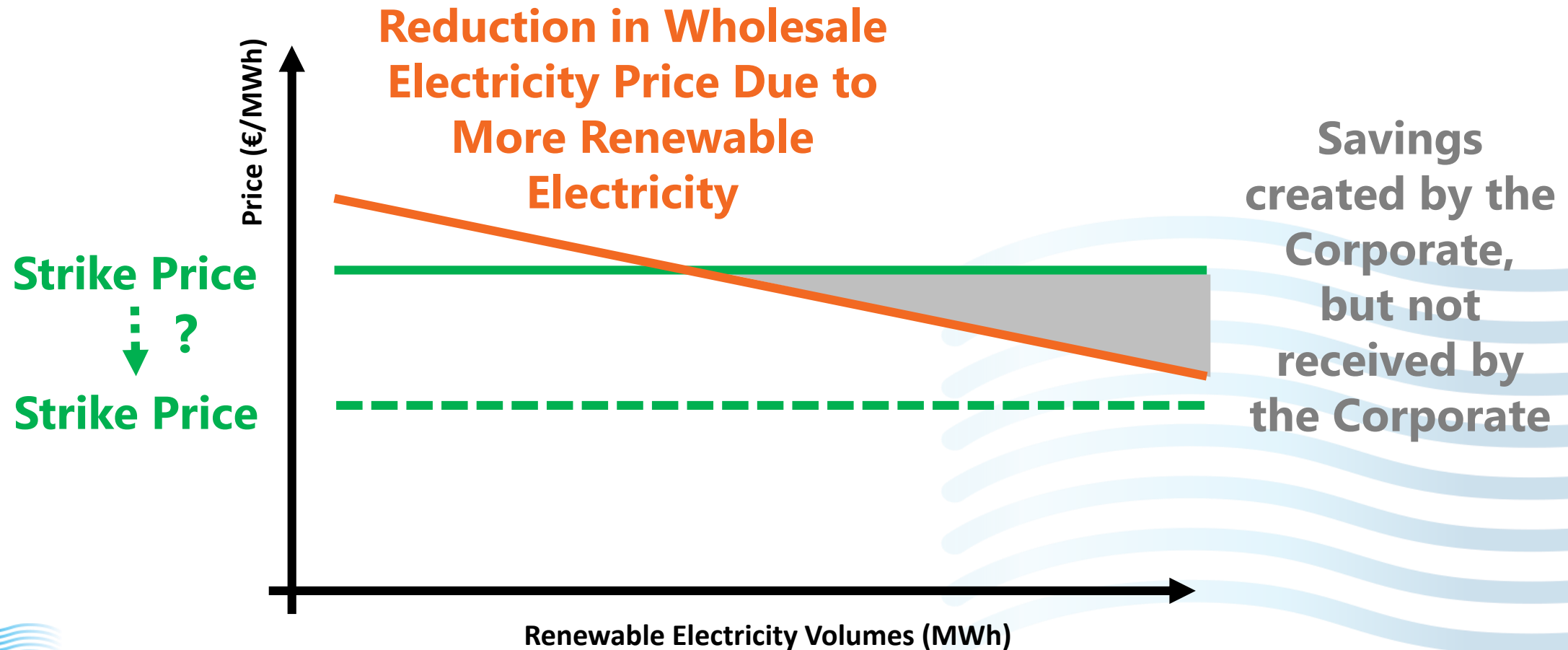


State guarantee for cPPAs similar to Norwegian Export Credit Guarantee scheme



Increase carbon prices in the electricity sector e.g. carbon floor price
(as recommended by the Joint Oireachtas Committee on Climate Action)

Can we Reduce the Strike Price to Make cPPAs more Attractive?



Government policy choices will largely decide the prices for RESS & Corporate PPAs – IWEA asked Everoze to quantify this

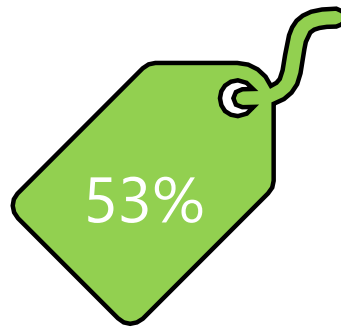
More Details:
[Slides/Video](#)

Policy Could Add Costs

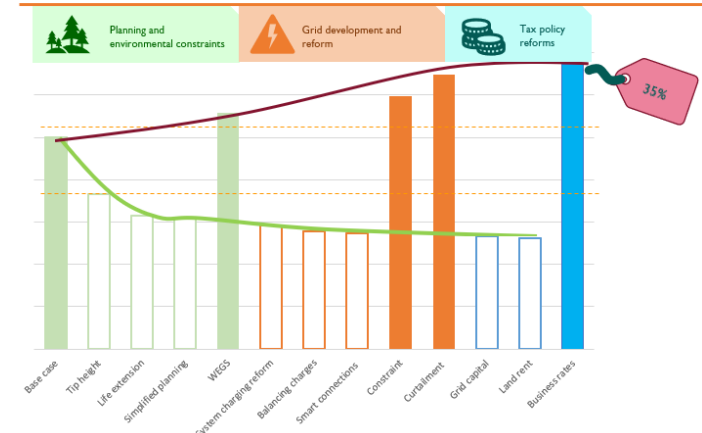


Vs.

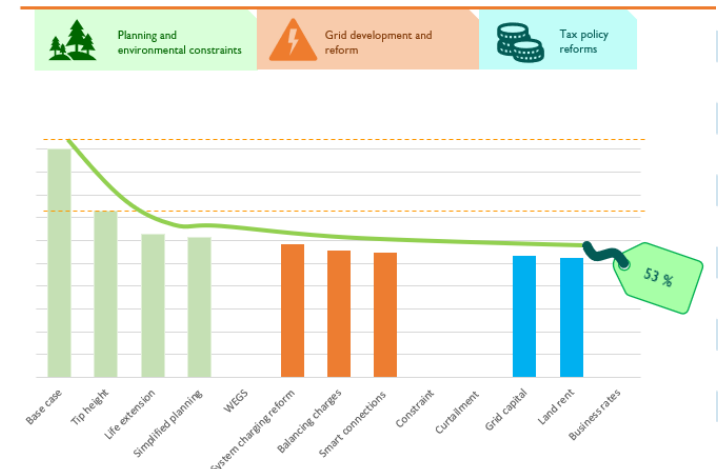
Policy Could Reduce Costs



Conclusions



Conclusions



Bellacorrick:

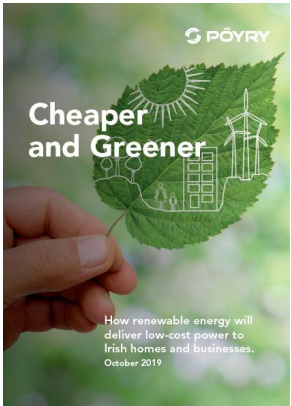
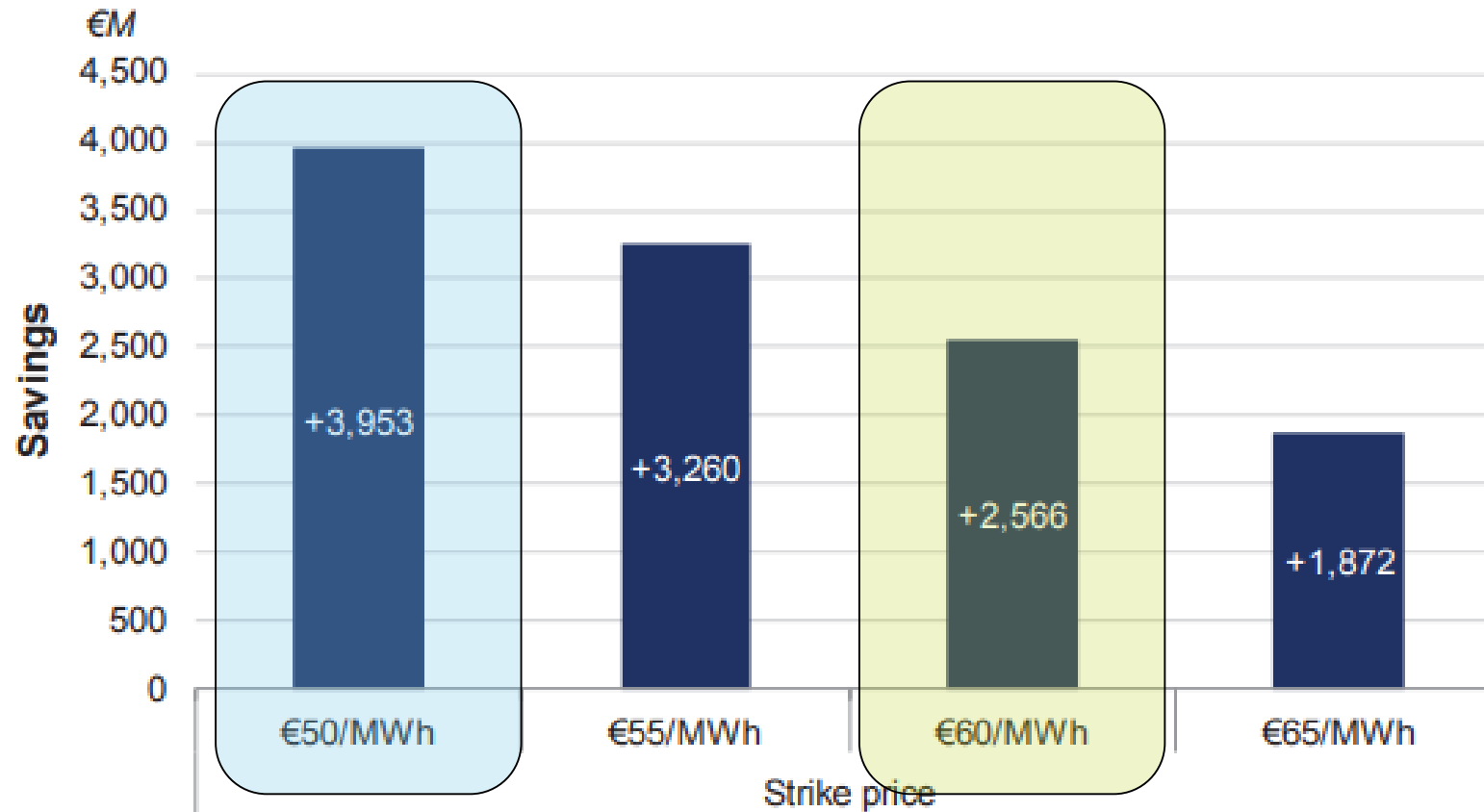
**New turbines are 3.2 MW
vs. the original 0.3 MW,
so
x10 times the Power for
x3.6 times the height
(~180 m high).**

**22 Original turbines will
be replaced by 2 new
turbines
(~50 m high).**



€10/MWh Change in LCOE has ~€1.5 billion Change on Consumers

Figure 3 – Sensitivity of Net Consumer Value to different auction strike prices (€M, real 2017 money)

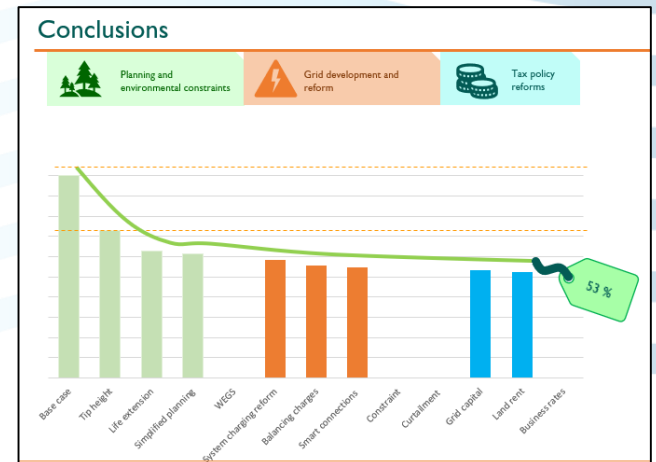
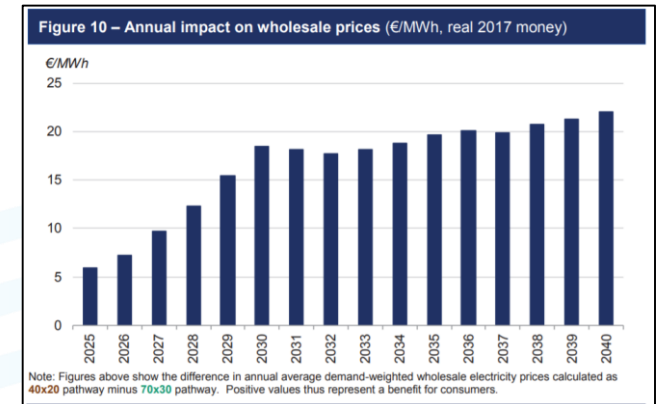
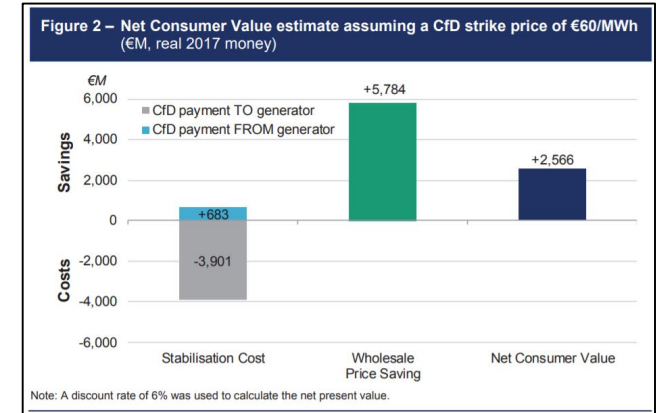


Conclusions

- RESS will very likely save money for the consumer:
 - Benefit mainly arise from lower wholesale prices
 - This can be used to cover other costs of 70by30

- Corporates are creating a large saving on the wholesale market when they sign a cPPA, but they are not getting all of this saving:
 - So there is a strong economic case for new policies to ‘share these savings’ with the CPPA market.

- Lower wind energy prices will benefit both RESS and cPPAs:
 - Policy and regulation will have a major impact on this price
 - It could drop by to <€40/MWh or increase to >€100/MWh





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