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PHILIPLEE

ENERGY CORK 2018

ALICE WHITTAKER, PHILIP LEE 12 April 2018

PHILIP LEE EXPERTISE



Award-Winning Team





Alice Whittaker Environment

Siobhan McCabe Energy



Jonathan Kelly Project Finance



Eoghan Doyle Corporate





CORPORATE PPA DRIVERS



What Buyers Want

- Guarantees of Origin (GOOs) / Green Certificates / Green Attributes
- Local / Regional Additionality
- Scale To Meet Sustainability Targets
- Creditworthy and Strategic Partners
- Diverse Portfolio
- Great PR / Leadership / Competitive Advantage
- Hedge Energy Costs Access to REFIT or RESS Auctions



Sustainability Markers



SUSTAINABLE G ALS



Ireland's food and drink sustainability programme



















Corporate PPA Essentials 6

Sustainable Buyers (selection)



Good PR and Big News





Microsoft inks largest corporate solar PPA for 315 MW project in Virginia

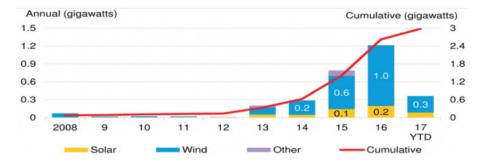


November 6, 2017

This article first appeared on the BNEF mobile app and the Bloomberg Terminal.

- Tech giant will purchase 180MW from Vattenfall wind farm
- Companies have purchased 360MW of renewables in EMEA in 2017

EMEA corporate PPA volumes, by technology



Source: Bloomberg New Energy Finance. Note: Other refers to biomass & waste, hydro and geothermal projects, EMEA refers to Europe, Middle East and Africa Region.





Good PR and Big News



Brookfield to Power Facebook's Irish Datacenter

April 6, 2016 by Carl Weinschenk



Facebook logo

Brookfield Renewable Energy Partners and Facebook have announced a renewa supply agreement. Under the pact, Brookfield will supply all of the wind power us Facebook's Clonee, County Meath, Ireland facility. The datacenter now is under

construction.

The Yahoo story says that Brookfield has more than 465 MW of wind assets in Ireland. The contract, which has a minimum length of ten years, will see Brookfield supply about 150 MW of wind to Facebook annually. Facebook says that the datacenter will be one of the most technically advanced and environmentally friendly in the world.



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Calls for European corporate PPA

support

13 December 2017 by Craig Richard

EUROPE: Facilitating corporate renewable power purchase agreements (PPAs) can "play a decisive role in delivering Europe's climate and energy objectives", more than 50 multinational companies and industry organisations have said.



Norsk Hydro's PPA for the Markbygden ETT site (above) is though to be one of the world's largest renewable power deals

In an open letter to the European Union's energy ministers ahead of their meeting on Monday, the group also called for a renewable energy target of at least 35% by 2030.

Industry organisations including WindEurope and SolarPower Europe, and blue chip companies such as Facebook, Google and Microsoft, co-signed the letter.

MORE ON THIS TOPIC

Denmark renewables generation grows 11%

UK wind generation reaches record levels

Vestas and EDPR install single-converter windsolar hvbrid

Dutch roadmap details

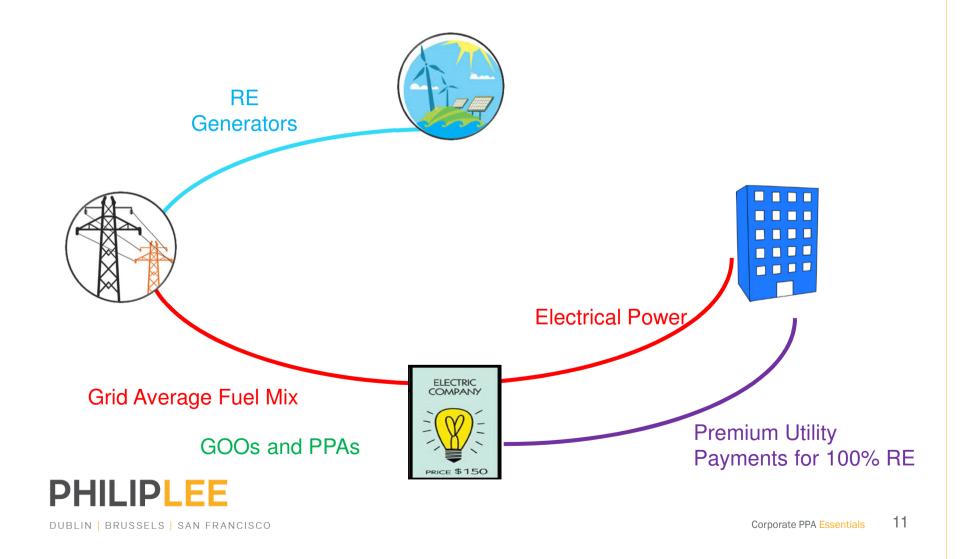


GREEN ENERGY PURCHASING

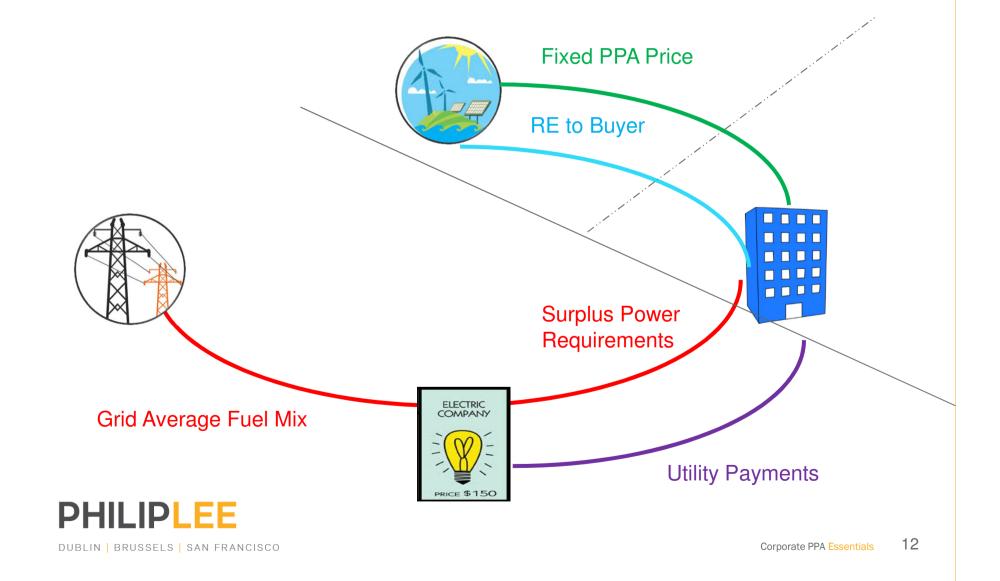
OPTIONS

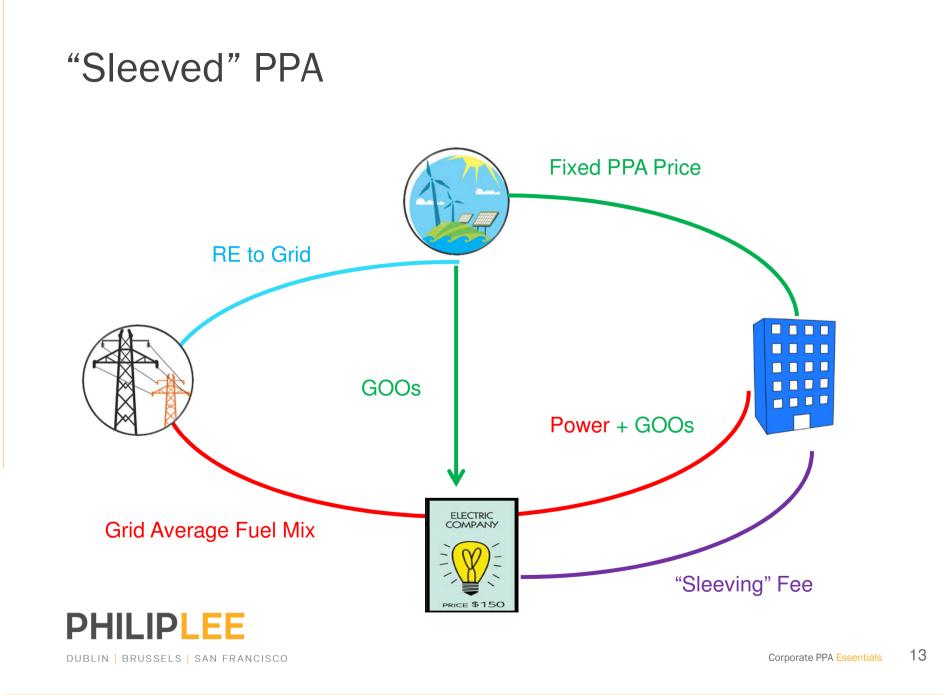


Typical Supply Contract - 100% RE

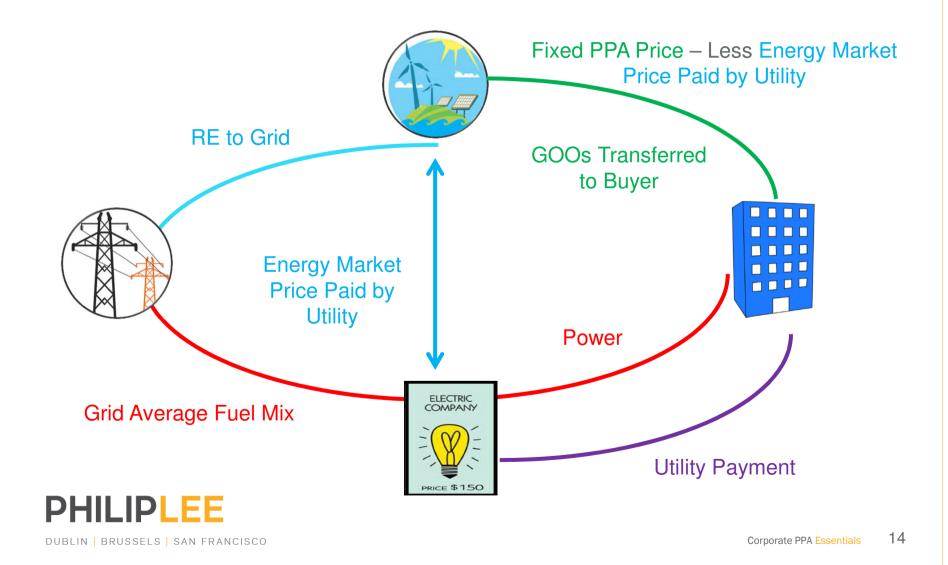


'Private Wire' – Autoproducer Supply





"Virtual" PPA (Contract for Difference)



Green Energy Purchasing in Ireland - Issues

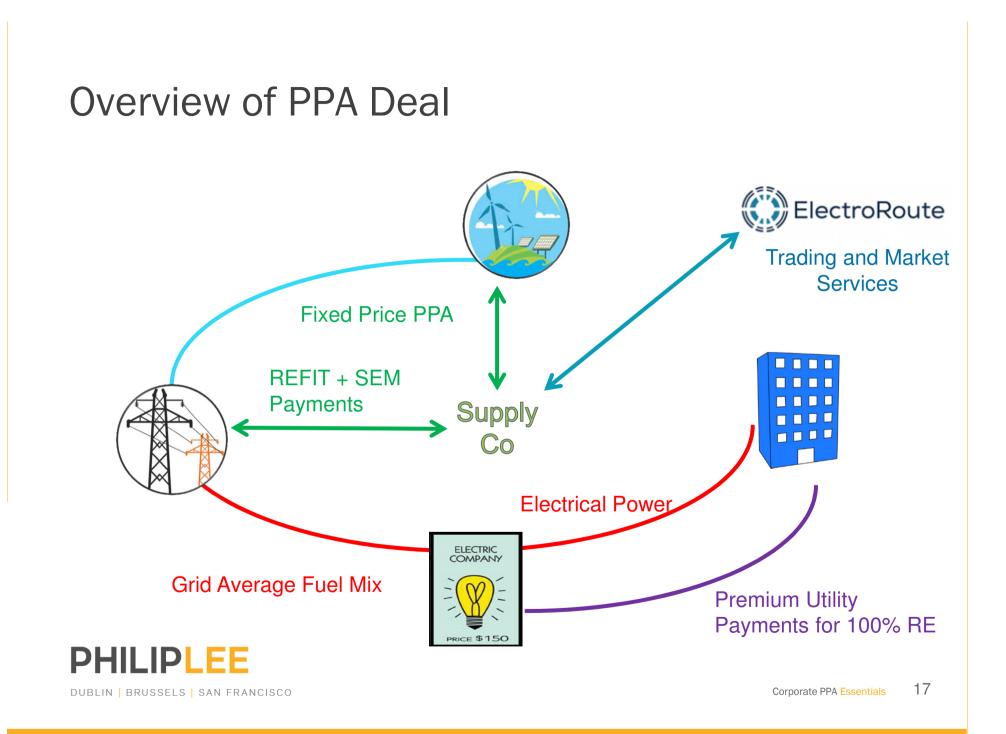
- No GOOs for REFIT supported projects
- Few projects of SCALE
- REFIT price distortion
- No REFIT for solar / offshore wind
- "Private Wire" constraints
- Project pipeline uncertainty / delays
- Market and Regulatory Uncertainty (SEM/i-SEM; REFIT/RESS; GPA/ECP-1)



TULLAHENNEL WIND FARM

CORPORATE PPA





PPA Deal – Some Features

- Licensed Supply Co (supplier lite) Receives SEM Payments and REFIT
- PPA with Generator Green Attributes
- Trading and Market Services Agreement
- Key (Non-Price) Provisions:
 - Market and Regulatory Changes e.g. Risk Allocation for Balancing Costs
 - COD, Performance, Compliance
 - Break Clauses / Termination Payments / Review Periods
 - Change in Control, Direct Agreement, Additional Generators



LOOKING AHEAD



Furthering Potential for Corporate PPAs

- 1. Renewable Energy Support Scheme (RESS) Design:
 - Back-to-back RESS "Auction" for Corporates
 - Separate "Auction Pool" for Corporates

- 2. Proposal for new EU Renewable Energy Directive
 - Allow issuing of GOOs for RES bought
 - in competitive setting (auction/tender) or
 - under long-term Corporate PPA



Furthering Potential for Corporate PPAs

3. Facilitate Private Wire / Autoproduction:

- Update legislation/policy to allow range of demand management solutions
- 4. Set ambitious targets factoring in corporate purchasing
 - Provide clear regulatory / contractual framework for SME scale purchasing
 - Provide clear regulatory pathway to large scale purchasing offshore wind



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Thank you for listening.

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