



# CIBSE Energy Performance Group

**Power Hour Webinar, 25 September 2020**

**“Green energy tariffs, power purchase agreements, offsetting and insetting”**

**Comments and questions pasted into the event chat pane:**

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## Green tariffs and REGOs

- After Brexit will REGOs still be tradable across Europe?
- is the value of the REGO related to Carbon pricing?
- How green is 'green'? My understanding is that energy from municipal waste is also REGO certifiable.
- If REGO is attached to brown electricity then the original electricity should be counted as brown or we are double accounting?
- For an organisation to go on a so called green tariff it feels as though it could be classed as green washing
- If some of the utility suppliers are moving to green tariffs irrespective of demand from customers that must create significant 'Impact'
- Can REGO's not be used as a loophole for suppliers to appear green and sustainable without ever generating renewable energy?
- Even though the REGO value is small, given many sources of revenue in a subsidy free world are not absolutely certain (i.e. flexibility services) and subsidy free development so economically tight, does the REGO value certainty not assist in business case for new developments?
- But if you purchase a REGO, does that not guarantee that green electricity will have been produced?
- The additionality Sarah explained is sought, but some consumers will accept REGO-certified waste to energy schemes. The waste of secondary heat from EfW plant also warrants discussion outside this PPA etc. power-consumption focus.
- Is there any global auditing of these tariffs to ensure that they are legitimate?
- Surely buying brown electricity with a REGO is the same as just buying an offset? Even though most suppliers market it as green and most carbon accounting protocols will allow the consumer to call it zero carbon

### **Written answers from Sarah Merrick:**

- If the REGO is sold then the physical electricity is no longer green to avoid double counting.
- Ofgem regulates green tariffs, making sure that suppliers retire sufficient REGOs each year.
- I think the biodegradable element of waste is eligible for REGOs. Some green tariffs specify that they don't use biomass or imported REGOs to try and deliver some differentiation
- The REGOs are retired on a yearly basis, they don't need to match in real time. REGOs can also be banked, they don't run out immediately so suppliers can make sure they have enough REGOs to cover variations in consumption and output across the year

## PPAs

- With wind and even solar varying so wildly (wind over this summer has been very poor) how can you guarantee a particular quota?
  - You make a good argument for the additional investment PPA support. I can't see claims arising when the wind drops or overnight, when the grids are resilient enough including energy storage and interconnections.
- What would you say the minimum viable offtake size is for a CPPA?
- Hi Richard, what is an example of a balancing services provider? who might they be?
- Richard, what would you do differently next time round? Where do the potential improvements lie?
- Is there a minimum size to a PPA?
- Do PPA's result in any additionality? Are they taking renewable energy away from the grid?
  - PPAs do provide additionality as a corporate PPA normally directly funds the creation of the renewable source, hence the long term nature of the deals

## Offsetting and insetting

- I feel offsetting is the perfect excuse for not changing out primary and direct carbon emissions. Airlines just purchasing offsetting to continue burning fossil fuel is not going to achieve anything



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- But as climate change is a global problem, offsetting allows investment to flow to those parts of the globe which would not otherwise decarbonise.
- Can Offsetting occur anywhere? Someone suggested that it can only be done in countries not part of the Kyoto agreement.
- The councils I work for are determined to only use offsets for the last very small part of our current emissions required to reduce them all the way down to net zero - certainly no more than the last 10%
- How does the cost of offsetting compare to the cost of implementing cost reduction measures or the predicted carbon market price?
  - Why not offset while you reduce emissions?
    - Because we are on an emissions reduction pathway and projects with a positive financial return are being prioritised. Offsets are just an added cost
      - Understood. However being on the pathway implies that emissions are still being produced. Why not offset them.
- I would tend to agree that net zero is the enemy of carbon reduction. A low cost carbon reduction project will be £500/tonne. A low cost offset is 50p/ tonne. Offsets should be based on quantifiable, long term sequestration. The carbon price on the EU market is starting to approach a level where this becomes a viable use of tax funds. Interesting how much interest UK Govt. has shown in companies like Climeworks.
- How long can you measure reductions in emissions – 1 year, 2 years, 50 years – and how valid is this ?
- I'm interested to understand how rainforest protection offsetting projects can demonstrate 'additionality'
- will the introduction of Hydrogen produced from renewable energy into the UK gas network have an effect on these plans?
- Would it not be easier, cheaper and more effective to just limit/reduce carbon emissions into clearly defined areas without crossing boundaries i.e. grid, home, office etc which is easier for people to visualise and manage. All these renewable inject into the grid so you cannot positively isolate them.
- I am unconvinced by offsetting. For instance do trees planted as part of offsetting projects actually last? There are reports that most trees die after a couple of years... Who is following up those projects to make sure they are long-lasting?
- Do we need to limit how much offsetting can be done?
- @James, could you take a moment to discuss "Carbon Insetting" further. It would be good to understand how this is applicable to different organisations.
- Do carbon offsets not result in stranded assets if used as the primary step in the energy hierarchy?
- @James - plugging the bath is an excellent image.
- Is there any analysis of the relative merits of demand reduction, Green Tariffs, PPA and carbon-offsetting?
- Am I correct in my understanding that planting trees results in them becoming effective after at least 10 years
- My council is going to plant a million trees in the next few years. Can we make some money by selling these as offsets?
- How can you verify an offset?
  - I think that insetting is just offsetting but within your supply chain so the verification is still the same

## Misc

- As a Non-domestic energy assessor I cannot see how we can verify/qualify and ensure double/treble or more accounting is going on. Also the carbon factors we use in the current software already accounts for the renewables on the grid so is this not double accounting? We need to ensure that thing remain easy to administer. Leave the grid to the suppliers and just account for what we can do onsite.
- Assuming of course the carbon factors are changed to reflect the current grid status, which they do not but this should change.
- Any thoughts about where energy commodity prices might go in the future? i.e. beyond next 4 years, anything up to 25 years ahead?
  - When the wind blows, hourly prices fall. many wind generators are not concerned, as they are supported by a CFD. However if there is no CFD, such as with a PPA, the realised prices are low. This will get worse in the future, as more renewables come online.
    - With renewables the marginal cost of electricity is zero so who knows!
- Are the operating costs of a wind turbine at all related by the amount of energy it produces?