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## **Electricity North West**

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## **Review of Existing Peer-to-Peer T&Cs**

UrbanChain had two workshops with all the project partners regarding how the peer-to-peer market would fit with the project framework.

The first workshop was a show and tell session with the project partners to demonstrate how the peer-to-peer market works. Four p2p models with the existing customers were presented:

- A peer-to-peer local energy market with a council in the South East
- A peer-to-peer private energy market with a housing association with properties in North West and North East
- A peer-to-peer energy bank scheme for large corporates
- A peer-to-peer energy market for electrification of transport and heat

## The presentation is attached.

Of the above models, the p2p private energy market with a housing group was the closest model for Rosendale Council as it focuses on solar for the households. In this model, we presented the business model as follows:

- The housing group has more than 13,500 properties to decarbonize. The housing group is the owner of the properties.
- There is a plan to install solar, battery and heat pumps for the tenants.
- The housing association owns the renewable assets
- The installation is free of charge following the survey assessment
- The tenants agree to pay the housing group for the behind-the-meter consumption
- The export volume from the solar systems will be exchanged to the other tenants without any installation or the offices of the housing group
- The export volume is paid to the housing group
- The deficit required for the tenants to be supplied by UC Energy

The second workshop looked at the suitability of the housing group p2p model for Rosendale Council. In the meeting, the following matters discussed:

- 1. Current import meters, export meters, types and their installation
- 2. How the position of export meters impact on the cost of power to the residents and the revenue for the solar systems
- 3. The ownership of solar and its impact on the bankability of the solar systems
- 4. How the current housing group model is different from Rosendale Council



For the above points, the following discussions happened:

First, the current non-half-hourly import meters should be replaced with SMETS2 half-hourly meters. This is very important. Any excess capacity from NHH meters will not be recognized in the industry and will not get paid. SMETS 2 meters will also facilitate the allocation of MOP and DC/DA as it can be programmed remotely.

Secondly, there was a query about whether they install export meters separate from import meters. The difference between Rosendale Council and the current housing group is that the Council does not own the properties. Therefore, they cannot own the power behind the meter. By installing export meters separately, the Council will have their ownership. Despite the installation of a separate export meter is possible; however, the place of the meter will have impact on the cost of power for the tenants.

- If the export meter is installed outside the boundary meter of a property, and the solar system is linked to the external export meter, the tenant of the property will receive power at the price of solar PLUS all non-commodity charges such as network and levy charges. This will not benefit the tenant as they receive power at the same price of power sourced from a generator located at DNO 16, Electricity North West.
- In this case, the Council would need to reduce the cost of solar for the tenants which will impact the revenue for the Council
- There is a possibility to have a private grid line for the terrace houses in the same rows and add the export meters to the private grid. The benefit of this model is that not only the tenant of the property with solar installed will benefit from an affordable tariff, but also the tenants in the same row will benefit from the reduced rate. However, this will add cost to the project.

Thirdly, the Council does not own the properties. Therefore, the roofs cannot be leased from the tenants. The tenants do not have enough credits as individuals and will cause issues for the bankability The options to consider for the bankability of the renewable assets. There are the following options to consider:

- Rosendale Council override the credit of tenants and create sinking fund to provide bankability for the renewable assets
- A community-based group (an ESCO model) to be put in place and provide the credits to the members of the group
- A public-private partnership will help to attract private investors into the model.

Despite the challenges discussed above, there is no reason for the tenants to be aware of any model above. This is the changes and work to be done behind the scenes. The tenants want a simple supply contract. However, tenants should be aware of the following points:

- The contract is a fixed contract and not subject to the price cap modifications.
- The duration of the contract is one year, and the tenants have the choice to stay or leave. However, if they leave the solar volume should be redirected to the export volume and not be used by the tenants

To have a strategy to keep the tenants in the scheme, we need to make sure the prices are competitive and stable for the tenants without any exposure to the price fluctuations of the wholesale market in winter or at special circumstances.

The T&Cs for the tenants are attached to this report.