



# Delivering Energy for Londoners

**The Viability and Potential of a London Supply Company**



**CLEAN, AFFORDABLE ENERGY,  
FOR PEOPLE, NOT FOR PROFIT**

# London's Energy Future

**M**ayor Sadiq Khan has made a crucial decision for London's energy future, to set up Energy for Londoners (EFL), a new not-for-profit energy company for the capital. EFL has the potential to transform our city's energy sector and tackle both fuel poverty and climate change while putting power back in Londoners' hands.

With EFL, London has the opportunity to do something truly innovative, making our city and mayor a world leader on energy and providing a global model for the low carbon transition.

In order to keep this promise EFL has to be sustainable and robust. Delivering energy to thousands of customers requires both upfront investment and returns that ensure the viability of the company. It is important to have an accurate assessment of the financial implications of EFL.

Switched on London's financial modelling, conducted by Landman Economics, demonstrates that a fully licensed energy company, supplying direct to consumers, is not just a viable venture, but a profitable one, that would build revenues for and capacity in London. According to our modelling the company could make a total of £186.41 million over ten years.



Based on research by Landman Economics

# Why London needs a fully licensed supply company within two years

The difference between a ‘fully licensed’ and ‘white label’ company is frequently referenced. What is the distinction and why is it so important that London gets a fully licensed company?

A fully licensed company is one that has its own licence and can supply households direct. A white label company does not hold its own licence. If EFL was a white label it would rely on another company to supply London residents under a London-specific brand. London would only be responsible for marketing and customer recruitment. Our city’s involvement in decisions about energy provision and the revenues that accrue from that provision would be limited.

## Fuel Poverty

White labelling would not allow EFL full control over tariffs; instead tariffs would have to be negotiated with a third party. This would mean the company lost the creative ability to try out different tariffs, targeted at the fuel poor.

White labelling would mean that any revenues raised would be shared with a third party, decreasing funds available for lowering future tariffs or investment in energy efficiency and new renewable energy generation capacity.

## Clean energy

A white label company would not serve as a vehicle for significant investment in new renewable energy generation or energy efficiency measures in London.

A white label would not be able to partner with London community energy projects or offer Power Purchase Agreements.

## Democracy

Decision-making power over a white label company would largely reside with those governing the third-party supplier. London institutions – whether the GLA and/or councils – would have limited oversight over the energy supplier and its practices.

A fully licensed energy supply company could build its own customer base, workforce and identity, facilitating the participation of Londoners in the governance of the company and generating opportunities for discussions about climate change and fuel poverty.

## London as a world leader

If London wishes to position itself as a world leader in cutting-edge energy transitions and run public-public energy partnerships nationally and internationally, a white label is insufficient. Many local authorities across the UK are already white labelling, and sometimes with suppliers that have little in the way of a clean energy portfolio, and no interest in democratic governance. London has the opportunity to do something truly innovative, inspiring others across Europe and beyond to realise the potential of energy democracy. This opportunity can only be realised with a fully licensed company.

## Economic Activity

A fully licensed energy supply company based in and operated from London would create economic activity and skilled jobs in London – ensuring that our energy bills contribute to local employment and growth. Unite the Union and UNISON have backed Switched on London’s demands in part because they see the potential for a public energy company in London to act as a key institution in the low-carbon transition. White-labeling risks continuing the process of extracting wealth from our communities.

## Developing expertise and capacity locally

Managing all aspects of the energy supply business would allow the GLA to develop in-house skills that would be cheaper in the long run and more permanent. The low carbon economy is a big part of our future. It is essential that we build up public sector capacity in London to operate and regulate this sector. The white-label approach doesn’t build skills or capacity in London, while a fully licensed approach creates the space and skills needed for further growth.

## A Sense of Attachment and Trust

Having the company based in and operated from London creates a sense of ownership and attachment to the company among Londoners, making the company more attractive to sign up to. The Big 6 have left many people distrustful of energy companies. Because a white label is in large part a branding exercise that to some extent disguises the real supplier, there is a risk that instead of building trust with London residents, a white label approach is seen as a con.

# Assumptions and Definitions

We modelled the company's viability over a fifteen year period. We calculated the costs of establishing and running the company including energy purchasing costs. We calculated how much the company would have to borrow, when the GLA loan could be repaid (including interest) and when the company would start making a profit. We modelled for 3 tariffs.

Below we set out some of the assumptions and definitions we use. Then we explain in more detail the tariff structures we modelled, the finance required and outline the potential revenue that could be generated over a 10 year period. The model has been based on conservative assumptions – for example wholesale prices have a consistent upwards trend over the fifteen years. We also assume operating and network costs increase beyond inflation.

## Customer Base

We modelled for customer numbers reaching **35,000 by year 1**. And then increasing by **35,000 per year** until a customer base of 350,000 is reached in year 10. At this point it is assumed there will be no further growth. These rates were chosen in consultation with the GLA and based on the growth reported by new market entrants – such as OVO and Robin Hood. OVO have reported 61% annual customer growth since 2010.

Given the size of London's population and the success of new entrants in other cities, it is clear that these customer numbers are achievable, especially if EfL works with London boroughs, TfL and housing association on recruitment and marketing.

## Variable and Fixed Tariffs

For the modelling, we used Ofgem's standard consumption assumption – which is 3100 kWh of electricity and 12500 kWh of gas<sup>1</sup>. We modelled for a **fixed base dual fuel tariff of £970** – which was adjusted to allow some upwards and downwards tracking of movements in gas and electricity prices to minimise risk from energy market volatility. Future movements in gas and electricity prices were based on data from past years. However, price movement is kept to a minimum and the company should aim to keep prices relatively stable over time.

## Community Solar FIT

Using only 50% of the revenue generated from the Community Solar Tariff, EfL would be able to create a London Feed-in-Tariff to support community solar projects in the capital. In the scenarios we describe how many community solar projects could be supported. We predict that 1% of customers are on this tariff initially, rising to 10% after 10 years. We are assuming that the London FIT provides 7.25 p/kWh. This is the average recommended by the Solar Trading Association and Greenpeace for up to 50 kW installations for a London FIT scheme<sup>2</sup>. We modelled the number of community projects supported based on the experience of the London Community Solar project Brixton Energy Solar 1 (BES1) which raised £58,000 to fund the installation of a 37kW PV system on Elmore House on the Loughborough Estate<sup>3</sup>.

## Non-payment

We made the assumption that 2% of customers will be unable to pay due to financial difficulties and will default on their debts. In this situation, EfL was unable to recoup these losses.

<sup>1</sup> <https://www.ofgem.gov.uk/gas/retail-market/monitoring-data-and-statistics/typical-domestic-consumption-values>

<sup>2</sup> <http://www.greenpeace.org.uk/sites/files/gpuk/Solar-London-Election-2016-Report.pdf>

<sup>3</sup> <http://www.greenpeace.org.uk/sites/files/gpuk/Solar-London-Election-2016-Report.pdf>



James Taylor

# Fair Tariffs and Investment in London's Energy Future

A fully licensed London supply company would deliver affordable, green energy for the city's residents and crucially it would generate revenues for London and develop local capacity.

In this section, we'll set out the results of our financial modeling. They demonstrate that a fully-licensed London supply company is not just a viable ambition but would also be revenue raising.

We tested three tariffs in the modelling

- 1 Tariff for Londoners**  
(dual fuel tariff for London households)
- 2 Tariff for Everyone**  
(dual fuel tariff for households outside of London)
- 3 Community Solar Tariff**  
(higher price dual fuel tariff to support community renewable energy)

To effectively tackle fuel poverty it is important the company offers clear, simple choices to energy users. The confusion created by a multitude of energy tariffs is well documented<sup>4</sup>. By having easy-to-understand tariffs Efl can offer greater accountability and enable people to make better energy choices. Unlike most providers Efl would not put customers on prepayment meters on higher tariffs, they would be offered the same rate as households who pay in other ways.

Unlike the Big Six energy companies, Efl's tariffs would be extremely competitive and would move inline with energy price changes. This operates on a similar basis to Robin Hood Energy's variable tariff.

<sup>4</sup> <https://www.gov.uk/government/news/cma-sets-out-case-for-energy-market-reform>

## Tariff for Londoners

Efl should offer a lower tariff to London residents. Robin Hood Energy and Bristol Energy both offer people living in their local area a preferential lower rate tariff: We propose Efl does the same. This is crucial to mitigate against high rates of fuel poverty in the capital. A fully licensed company could offer London households lower rates. It is not clear that a white label would be able to offer a preferential rate and it would be a decision that was taken by the partner company rather the GLA.

We expect the majority of Efl's customers to come from inside the capital, indeed the preferential London rate and concentration of marketing within London is designed to ensure this is the case. *Tariff for Londoners* would be Efl's most popular tariff. We have modelled for 90% of customers to be on this tariff at the beginning, falling to 80% of customers by Year 11 – because of the growth in people choosing the *Community Solar Tariff*.

*Tariff for Londoners* will cost the average London household **£970 per year** based on standard consumption, with small variations for changes in the price of wholesale gas and electricity. The lowest the tariff falls to is £957 and the highest £1059. In comparison to other publicly owned energy companies – such as Bristol Energy and Robin Hood Energy – this tariff is competitive.

James Taylor



## Community Solar Tariff

London could generate up to 20% of its power needs from solar energy. However, the recent cuts to the solar Feed-in-Tariff had a detrimental impact on the uptake of solar energy in the capital. In particular, London's community energy projects have been hit and are now struggling to raise funds for future projects. *The Community Solar Tariff* would counteract this and provide an extra lifeline to these projects.

*The Community Solar Tariff* could fund a London Feed-in Tariff which would support community renewable energy projects across London. The Feed-in-Tariff could be funded from 50% of the additional income from the renewables tariff.

From Year Two, 1% of the customer base will be on this tariff which will have an average **annual bill of £1320**, which is competitive with other green fuel tariffs. We have estimated the customer base will rise annually by 1% and in Year 11, peak at 10%. There is the potential to exceed these figures given the success of energy supply companies – such as OVO and Good Energy – whose customer base are primarily on more expensive renewable energy tariffs.

The growth of people choosing the *Community Solar Tariff* would depend on the strength of the EFL brand and people seeing the growth of community energy projects where they live or work. The installation of, for example, solar panels on local schools, hospitals or bus shelters fosters a sense of connection between people and local energy generation, encouraging them to switch to the tariff. There is also the possibility of partnering with community energy projects to promote the tariff to their members and shareholders.

*The Community Solar Tariff* would have funded the equivalent of 9,419 projects in the first ten years.

## Tariff for Everyone

The number of customers outside of London will consist of 10% of the customer base. We have modelled for the tariff to cost an average of **£1045 per year**. Companies like Robin Hood Energy have a much larger percentage of customers from outside the local region but we would envisage EFL concentrating efforts on recruiting customers from inside London.

## Doing the Math – Comparing Energy for Londoners Tariffs

The majority of households in the UK are on a Standard Variable Tariff, which is the most expensive tariff offered by the Big Six energy companies. The Competition and Market Authority stipulated that households on SVT are being overcharged by as much as £160<sup>5</sup> each year.

Our model shows that the company is able to make a profit with a base tariff of £970. This represents a **saving of £159 off the average dual fuel tariff** which according to Ofgem is £1129<sup>6</sup>.

When we compared EFL's tariffs with other tariffs on the market, we can see that EFL's Tariff for Londoners undercuts some of the Big Six's tariffs by as much as £296 and is competitive with other public energy suppliers such as Robin Hood. EFL's Community Solar Tariff would have a degree of flexibility to ensure competitiveness and could be altered annually to match market prices of renewable energy tariffs.

Supplier Tariff	Average Annual Cost – Dual Fuel Bill
EFL Tariff for London	£970
Robin Hood Energy – Prime Gas and Electricity Fixed V8	£1012
EFL Tariff for Everyone	£1045
Average Dual Fuel Tariff	£1129
Ecotricity Green	£1217
NPower – Standard Variable Tariff	£1266
EFL Community Solar Tariff	£1320

<sup>5</sup> <http://www.thisismoney.co.uk/money/bills/article-3151966/Households-overcharged-1-2BILLION-year-energy-suppliers-says-CMA.html>

<sup>6</sup> <https://www.ofgem.gov.uk/system/files/docs/2017/07/bills-prices-july-2017.pdf>

# Financing Energy for Londoners

The Greater London Authority will loan the initial £2 million set-up costs, as well as covering initial operating costs and upfront gas and electricity purchase costs, which total £1million. This means just one initial **loan of £3million** is needed from the GLA.

The loan would be paid back to the GLA by year 2 at an interest rate of 11%. Our model shows that, for the fifteen years of operation, a profit is made every year.

## Costings for Energy for Londoners

Energy for Londoners will have

### Operating and Networking Costs

We have used the data generated by Ofgem on the average operating costs and network costs. In our assumptions, **we incorporated a 1% annual real-term increase in network costs and operating costs**. This is on top of general inflation in the economy, incorporated through the CPI deflator.

### Fossil fuel volatility

We modelled for major volatility in wholesale electricity and gas prices, as seen between 2010-2016.

### Hedging

We modelled for purchasing **one third of energy one quarter in advance and the remaining two thirds on a month ahead and within month basis**. This hedging is typical of small entrants and was the proportion of hedging the GLA were interested in seeing modelled.

In previous models we also demonstrated that it is possible for the supply company to purchase energy 18 months in advance as recommended by Ofgem, however the upfront capital costs would be higher.



James Taylor

# Energy for Londoners – what it looks like

We modelled for EFL to launch with a 35,000 customer base. This will increase at a rate of 35,000 customers per year until 350,000 customers is reached in year 10.

Our model found that the company turned a profit in Year 1 of £9.61 million. By Year 10 profits had reached £186.41 million. EFL will require a loan of £3 million from the GLA. This will be repaid by year 2.

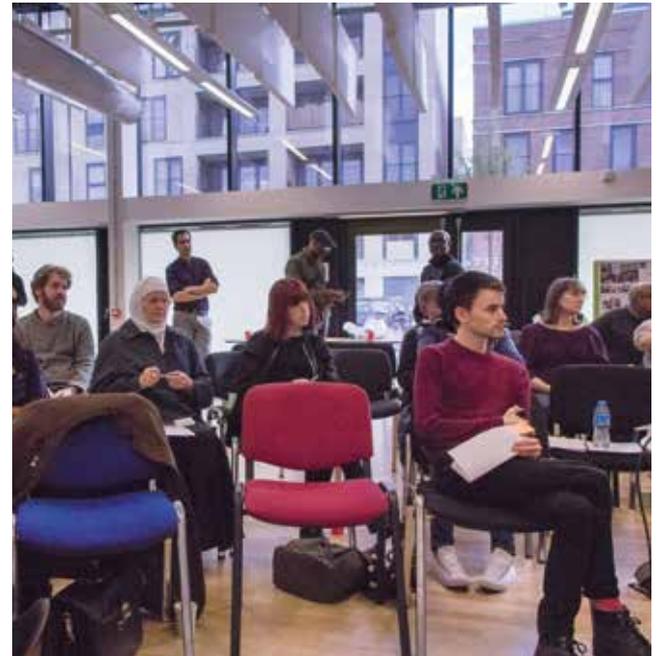
## Community Solar Tariff

In Year 3, the tariff will support the development of 228 community energy schemes like Brixton Energy or 2,112 homes with 4kW solar panels. By Year 10, the *Community Solar Tariff* could provide a revenue of £40.43 million, which could deliver 9,419 community solar schemes or 87,123 solar-schemes on homes.

Assumed annual customer growth:	35,000
Customer base by Year 1:	35,000
Profit achieved:	Year 1

	Year 1	Year 3	Year 10
Customer numbers	35,000	105,000	350,000
Annual costs (£m)	5.60	90.78	302.16
Annual revenue (£m)	34.43	105.30	347.52
Cumulative Profit (£m)	9.61	32.30	186.41
Number of Community Solar projects funded by Community Solar Tariff	0	228	9,419

# Energy for Londoners, Revenue for Londoners



James Taylor

The financial modelling set out here shows that a London fully licensed supply company is not only viable but has the potential to return significant profits which can be reinvested in community energy schemes, in energy efficiency measures and in building up the expertise and capacity needed to put London at the forefront of the low carbon transition. A white-label scheme does not have the potential to return a profit at anywhere near the scale of a fully licensed company.

## Energy for Londoners can provide a lifeline to community renewable energy projects

As set out here the revenue from the Community Solar Tariff can be leveraged to fund a London Feed-in-Tariff and provide a much needed income stream to community renewable energy projects springing up across London.

As the government lags behind on delivering the low carbon economy, London can jump ahead. By establishing an energy supply company, our capital can build revenue and capacity and establish itself as a world green leader.