



New Thinking
For Energy

Changing actor dynamics and emerging value propositions in the UK electricity retail market

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1 Introduction

The energy system is changing rapidly. Decarbonisation drivers, technological change, digitalisation and user preferences are coming together to fundamentally alter the economics of energy service provision, and this in turn is leading to new business models and tariffs, set around new service offers.

Recognising the pace and scale of change in consumer offerings in the energy sector the IGov project (www.exeter.ac.uk/igov) commissioned Jeffrey Hardy to update the review of non-traditional business models which Ofgem undertook in 2015. The aim of his work was to map the current energy system actors based on a review and classification of domestic and non-domestic business models, particularly in relation to electricity supply. A summary of the data provided by Jeffrey Hardy can be accessed [here](#). This report builds on his work to provide further analysis and comment on what is happening within UK electricity retail and some of the governance implications of that. This report also specifically focusses on the domestic sector, in part to reflect the media and political focus on this sector of the market, but also reflecting IGov's interest in putting people at the heart of the energy system.

The key findings of this report are that there has been increased competition in the UK domestic electricity retail market in recent years, both in terms of the number of suppliers and tariff diversification. Despite this, barriers to market entry and expansion continue to exist with simplified routes to market entry – namely supplier-in-a-box and white label arrangements – proving to be very significant for new supplier entry.

There was a particularly high level of supplier exits in 2018, mainly due to high levels of competition, cost volatility and policy uncertainty. This has driven increased regulatory focus on Supplier of Last Resort (SoLR) arrangements and licensing. Whilst minimising the costs to consumers and market participants of supplier failure is important there is a need to ensure that the reasons for increased supplier failure are clearly understood and that short-term licensing reforms do not create new barriers to innovation.

Whilst the range and number of value propositions has increased, particularly in relation to local energy and electric vehicles, progress in relation to flexibility value propositions is slow, largely due to a lack of incentives on suppliers to offer time-variable prices. There is however increased activity related to partnerships between (medium and large) suppliers and providers of 'behind-the-meter' devices such as home energy management systems and electric vehicle charging.

In terms of wider innovation, the role of 'protected spaces' to trial business model innovations outside of the full regulatory environment is important, with local energy again emerging as a key theme within the Ofgem Regulatory Sandbox and other trials. However the ability of these innovations to persist in the mainstream energy market is dependent on much wider reforms to flexibility markets, the supplier hub and half hourly settlement.

The key argument of IGov is that governance (policies, institutions, regulations, market design, network rules and incentives, retail policy) enables, undermines or channels innovation. This report provides a snapshot of recent changes in market offerings and analyses the evolution of value propositions. Whilst a range of new value propositions, aligned with higher levels of consumer participation, more localised energy systems and bundled energy services, are starting to emerge the core business model of the domestic retail market continues to be based on a volume commodity basis. Current, and imminent, reforms to energy system governance will be critical in shaping the ability of emerging value propositions to become established. In addition, co-ordination of these reforms will be required across supply, flexibility and networks to ensure unintended consequences do not inhibit innovation in an increasingly interconnected and complex energy system.

2 Methods

Licensed electricity and gas suppliers were analysed based on the database of licensees available on Ofgem's website¹. Further company information, such as size of business, status (e.g. active or non-active), age of business, were obtained from Companies House² and Endole³. Business activities and value propositions were taken direct from the websites of the companies. In some instances, grey literature was also used to supplement information from the companies' websites. Wider information, such as that on Ofgem sandbox trials, was taken direct from the primary source.

Suppliers were identified as 'active' or 'inactive' based on information provided on their website and account information from Companies House. Some companies were found to be 'dissolved' but had not revoked their supply licence. During the work, several suppliers (see section 3.1.1) ceased trading and customers were transferred under Ofgem's supplier of last resort guidance to another supplier⁴. Where this was picked up in this work, the supplier was removed from the analysis.

Supplier value propositions were then segmented using two approaches. First, the value propositions of the companies were categorised against the three broad themes and nine sub-themes identified in Ofgem's 'Non-traditional business models: Supporting transformative change in the energy market' discussion paper (see Table 1). Second, additional value propositions were added during analysis of the company business models. In some cases, these provided more specificity on value propositions (e.g. time of use tariffs (TOUT)) or represented a new value proposition (e.g. transparent⁵). Segmentation analysis was undertaken by examining clusters of value propositions together with analysis of how businesses marketed their products to consumers.

¹ The database was downloaded from <https://www.ofgem.gov.uk/publications-and-updates/list-all-electricity-licensees-registered-or-service-addresses> on 29th June 2018.

² <https://beta.companieshouse.gov.uk/>

³ <https://www.endole.co.uk/>

⁴ <https://www.ofgem.gov.uk/publications-and-updates/supplier-last-resort-revised-guidance-2016>

⁵ i.e. offering unique insight into the energy supplier, perhaps as a way to create a more trustworthy supplier model, this could include things like: showing customer numbers; years till business profitable, etc

Local services	Bundled services	Customer participation
Community	Energy Service Companies	Peer-to-peer
Municipal	Multi-service providers	Demand side flexibility
Housing Associations	Market services	Prosumers
		Next generation intermediaries

Table 1: Ofgem broad and sub-themes of non-traditional business models

For domestic electricity suppliers analysis of supply chain interactions was also undertaken. These focused on white labels, switching intermediaries, device vendors and emerging business models.

3 Results

3.1 Domestic electricity suppliers

In total, as of June 2018, there were 161 licenced domestic suppliers in the Ofgem database. However, only 74 were found to be 'active', that is having some form of webpage where a customer can visit and procure services, see Figure 1. The majority, 85, appeared inactive in that no company website could be found and accounts on Companies House indicated the company was dormant or not trading commercially. Two companies were found to be dissolved but had not revoked their licences.

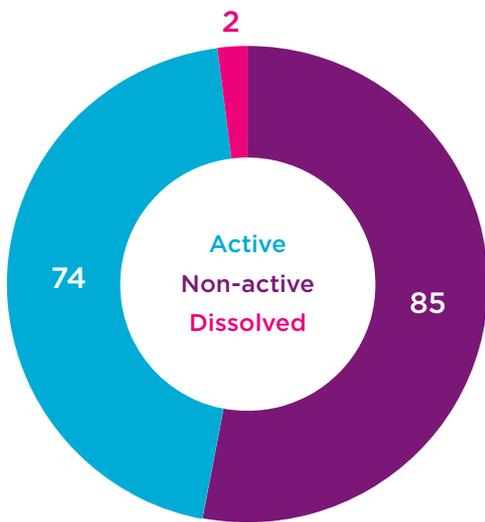


Figure 1: Total registered GB domestic electricity suppliers (as of 29th June 2018)

The number of active energy suppliers in Great Britain has grown significantly in the last few years, from 27 active domestic suppliers in December 2014 to 74 by June 2018. Whilst the six largest suppliers⁶ continue to dominate the market, accounting for 75% of customer accounts, they have seen a significant fall in market share since 2014, where they accounted for 92% of customer accounts⁷. These six companies are the only ones who have a market share above 5%. As of June 2018, seven suppliers had a market share between 1% and 5% and 61 suppliers had market shares below 1%⁸.

⁶ British Gas, EDF Energy, E.ON, npower, Scottish Power and SSE.

⁷ Ofgem Data Portal - Electricity supply market shares by company:

Domestic (GB) - <https://www.ofgem.gov.uk/data-portal/electricity-supply-market-shares-company-domestic-gb>

⁸ Ofgem 'State of the Energy Market 2018'

https://www.ofgem.gov.uk/system/files/docs/2018/10/state_of_the_energy_market_report_2018.pdf

Despite the low market share held by the majority of new entrant suppliers, competition in the retail energy market has increased considerably in recent years. This is likely to have brought increased price competition and pressure to improve customer service offerings with the most recent Citizens Advice customer service rankings indicating that small and medium-sized suppliers hold seven of the top 10 places⁹. However, as discussed in section 3.1.1, there was a high number of market exits in 2018, partly due to intense price competition, and Ofgem has recently increased ongoing checks of suppliers' financial position in order to increase assurances regarding the financial viability of suppliers.

Over the past six-years market entry has been consistently high, with a notable spike in companies who entered the market in 2015. Figure 2 shows the year of market entry of active domestic electricity suppliers.

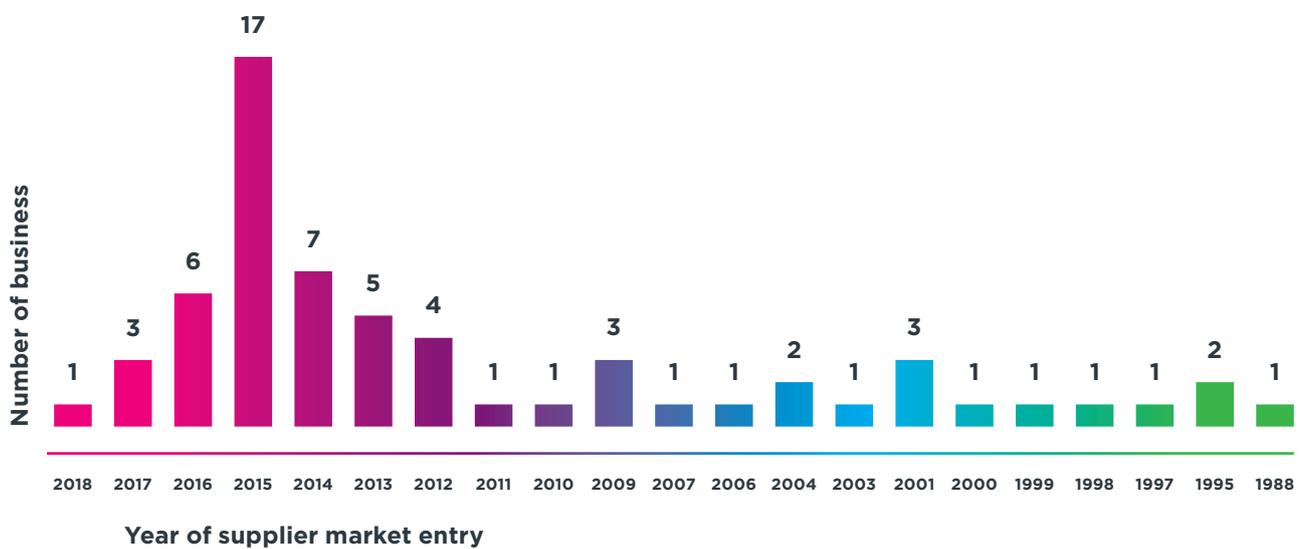


Figure 2: Year of market entry of GB domestic electricity suppliers

There are a number of reasons why market entry may have been particularly high during this period. This includes the high media profile of energy costs driving increased switching¹⁰, as well as changes to consumer preferences and technologies driving new value propositions. Additionally in 2010 Ofgem initiated a programme of Retail Market Review (RMR) which recognised that the energy market was not working well for consumers, partly due to the complexity of tariff options, the poor quality of information provided to consumers and low levels of trust in energy suppliers. In 2013 this resulted in the introduction of new rules which restricted the number of tariffs each supplier could offer.

⁹ Based on ratings for July – September 2018: <https://www.citizensadvice.org.uk/about-us/how-citizens-advice-works/citizens-advice-consumer-work/supplier-performance/energy-supplier-performance/compare-domestic-energy-suppliers-customer-service/>. Every 3 months, Citizens Advice compare and rank suppliers across five different customer service categories.

¹⁰ Following a spike and then lull in 2013, switching has been gradually increasing since 2014. See <https://www.ofgem.gov.uk/data-portal/retail-market-indicators>

In 2014 Ofgem referred the energy market to the Competition and Markets Authority (CMA) and the CMA concluded in 2016 that the market was not operating as it should, with domestic customers of the Big 6 energy companies paying £1.4bn a year more than they would in a truly competitive market. In their final report the CMA made a series of recommendations to improve the retail energy market and between 2016 and the present day a number of remedies have been introduced in line with the CMA's recommendations, including the removal of tariff restrictions in late 2016¹¹. Since this period a prepayment price cap has been introduced in 2017 and a default tariff cap was introduced in January 2019. The impact of the price cap on innovation and competition is still emerging, however recent analysis by Bulb Energy¹² suggests that the prices of the six largest energy suppliers are converging around the price cap, potentially reducing competitive pressure in the market.

Whilst the high level of entry into the retail market could indicate that the implementation of CMA remedies and other market interventions have reduced barriers to entry, our analysis shows that a high numbers of challenger companies have entered the market via simplified routes, such as the creation of white label providers and the acquisition of off-the-shelf pre-accredited licensed companies (or Supplier-in-a-box, SIAB, as discussed in section 3.1.2). This suggests that significant barriers to entry remain, particularly in relation to code compliance and industry data flows.

Additionally the relative slow growth of many new entrants (i.e. the persistently low number of suppliers that have achieved a greater than 1% market share) indicates that barriers to expansion exist for small- and medium-sized suppliers. The 2018 Ofgem State of the Energy Market¹³ report highlights this issue and suggests that the 250,000-customer account threshold, above which suppliers have to start to bear the costs of contributing to the Energy Company Obligation (ECO) and the Warm Home Discount (WHD), continues to be a barrier. Recent increases in cash flow requirements to meet ongoing checks of suppliers' financial position are also identified as a potential barrier to growth. To help to address these expansion barriers the Government has announced plans to reduce the participation threshold for the WHD to 200,000 customer accounts in 2019/20 and 150,000 accounts in 2020/21. A similar gradual reduction for the ECO participation threshold has also been announced.

Whilst supplier entry has been relatively high in recent years, during this period there has also been an increase in supplier failures, as discussed in the next section.

11 <https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf>

12 <https://utilityweek.co.uk/bulb-accuses-big-six-using-price-cap-target-not-limit/>

13 https://www.ofgem.gov.uk/system/files/docs/2018/10/state_of_the_energy_market_report_2018.pdf

3.1.1 Supplier exit

Since January 2018¹⁴ ten domestic suppliers have ceased trading and their customers have been transferred to another supplier under Ofgem's supplier of last resort (SoLR) guidance. A further five suppliers have exited the market due to a corporate decision¹⁵. The suppliers that have ceased trading between January 2016 and January 2019, together with the supplier chosen under SoLR, are summarised in Table 2 and Figure 3.

Exiting supplier	Date	Exiting type	Acquiring supplier
Tempus	Sep-16	Corporate Decision	-
GB Energy	Nov-16	SoLR	Co-op Energy
The Energy Deal (White Label)	Jun-17	Corporate Decision	Robin Hood Energy (White label parent)
Brighter World (White Label)	Dec-17	Corporate Decision	Robin Hood Energy (White label parent)
Future Energy	Jan-18	SoLR	Green Star
Flow Energy	May-18	Corporate Decision	Co-op Energy
National Gas and Power	Jul-18	SoLR	Hudson Energy
Iresa	Jul-18	SoLR	Octopus
Gen4U	Sep-18	SoLR	Octopus
Affect Energy	Sep-18	Corporate Decision	Octopus
Snowdrop Energy	Oct-18	Corporate Decision	Nabuh Energy
Usio Energy	Oct-18	SoLR	First Utility
Planet9	Oct-18	Corporate Decision	-
Extra Energy	Nov-18	SoLR	Scottish Power
Spark Energy	Nov-18	SoLR	Ovo Energy
One Select	Dec-18	SoLR	Together Energy
EPhase	Dec-18	Corporate Decision	-
Economy Energy	Jan-19	SoLR	Ovo Energy
Our Power	Jan-19	SoLR	Utilita

Table 2: Suppliers exiting January 2016 – January 2019

Sources: own analysis, Cornwall Insight, State of the Market report 2018¹⁶.

¹⁴ Due to the recent nature of some of these domestic suppliers ceasing to trade, not all been removed from the analysis (Usio Energy, Extra Energy, Spark Energy, OneSelect, Economy Energy and OurPower remain in the analysis). The others were removed on the announcement that the businesses ceased trading.

¹⁵ i.e. without SoLR arrangements being invoked.

¹⁶ This analysis is up to date as of 25th January 2019. However, due to the recent nature of Economy Energy and Our Power's exits they are still included in wider analysis of supplier numbers and value propositions, as well as in the underlying spreadsheet.

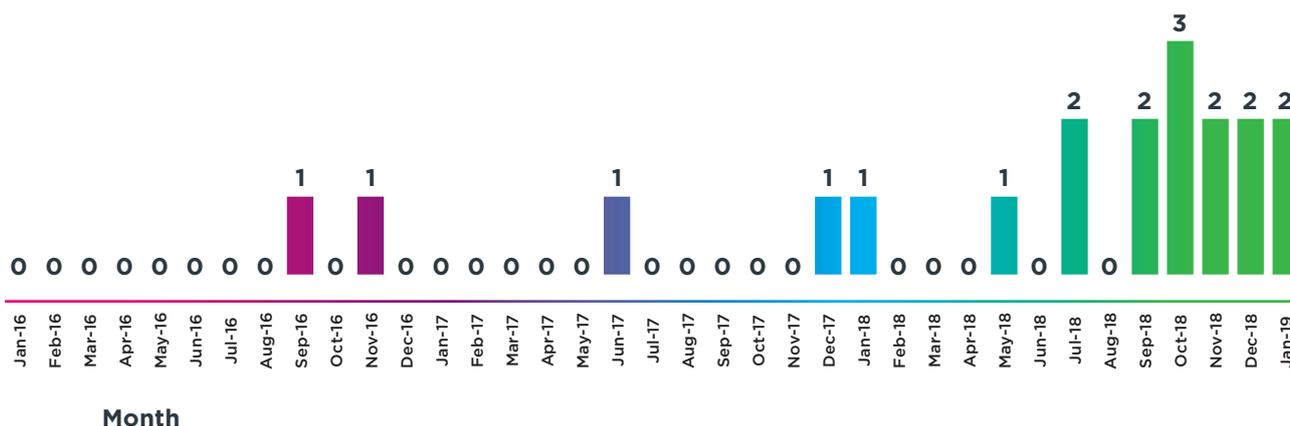


Figure 3: Number of supplier exits January 2016 – January 2019

The last 12 months have seen particularly high levels of market exit with analysis by Cornwall Insight¹⁷ indicating that 1.2million¹⁸ energy accounts have moved supplier via the SoLR process in the last 12 months. Reasons for the high number of supplier exits may include high levels of competition, rising wholesale costs, increasingly volatile imbalance costs and ongoing policy uncertainty¹⁹. The high rate of supplier failure has also driven increased focus on the cost to consumers of Supplier of Last Resort (SoLR) arrangements. Currently the costs incurred by the new supplier appointed under SoLR arrangements, as well as the bad debts of the failed company, are recouped from industry participants, and ultimately bill-payers. Recent months have also seen several suppliers fail to pay renewable energy levies on time, suggesting that further companies may be experiencing financial distress²⁰.

Medium-sized suppliers are dominating the acquisition of customers via SoLR processes with a big six supplier involved in only one SoLR transaction in 2018. In particular OVO Energy and Octopus were been particularly active in acquiring customers through the SoLR process in 2018.

In November 2018, recognising the increased rate of supplier exit, Ofgem published a consultation on a review of supplier licensing²¹ which sets out proposals to strengthen the criteria used to assess supply licence applications. The consultation also suggests that Ofgem intends to increase scrutiny and oversight of those already operating in the energy retail markets. Options to improve ongoing regulatory oversight include: a requirement for active suppliers to report annually on their financial and operational adequacy, to increase ongoing focus on their resilience; and an ongoing ‘fit and proper’ requirement. Ofgem expect to bring forward proposals for consultation in 2019. Ofgem also indicated that they will consult on revised supplier exit, Supplier of Last Resort process and license revocation processes, although a timeframe for these consultations has not yet been indicated.

17 <https://www.cornwall-insight.com/publications/chart-of-the-week/chart-of-the-week/2019/i-m-still-standing-medium-suppliers-lead-acquisitions>

18 This does not include Our Power’s 38,000 customers as they only ceased to trade on 25th January 2019.

19 <https://www.cornwall-insight.com/newsroom/all-news/2018-the-year-of-living-dangerously>

20 <https://www.theguardian.com/environment/2018/nov/23/spark-energy-goes-bust-and-leaves-290000-without-a-supplier/>

21 <https://www.ofgem.gov.uk/publications-and-updates/supplier-licensing-review>

The review of supplier licensing is ongoing, however options for reform could place higher requirements for lodging credit funds with implications for the viability of new entrants. Additionally, although the review highlights significant overlaps with the Ofgem's ongoing Supplier Hub and retail market reform processes the consultation's focus on incremental changes to licensing and enforcement are not in step with the transformation changes required to ensure a smart, flexible, people focussed GB energy system is delivered. In this regard, Laura Sandys and Jeffrey Hardy's recent Redesigning Regulation²² report suggests that there should be a much more fundamental review of licensing with a shift to an assurance scheme underpinned by an insurance policy regime, as common across many other sectors. This insurance component would replace the need for lodging credit funds as the premium would assess risk appropriately and fund any supplier of last-resort measures, releasing funds for investment in consumer-facing benefits²³.

High levels of supplier exit have significant impacts on both consumers and other market participants. It is therefore important that the reasons for the current high level of market exit are examined carefully to ensure any subsequent reforms are appropriate and do not make market entry more difficult for appropriately resourced and skilled companies. In particular the persistence of a highly prescriptive regulatory environment, despite the narrative of competition and principles-based regulation, should be reviewed. For example, at least one exiting supplier has cited the impact of the default tariff cap as a factor in their exit²⁴. The proposed changes to licensing arrangements may also impact on supplier-in-a-box arrangements as discussed below.

3.1.2 Importance of supplier-in-a-box (SIAB) model

This section examines the importance of the SIAB model for market entry for domestic electricity suppliers in GB. Supplier in a box (SIAB) – also known by other names such as 'off-the-shelf' – is where a specialist utility IT systems vendor gains an electricity supply licence and accedes to the requisite industry codes²⁵. This ready to go licenced company is then sold onto the new entrant and from this point forward the company assets are transferred to the new entrant and the new company can go through Controlled Market Entry (CME)²⁶. This process results in the new entrant avoiding most the accession process itself. Vendors of these services typically charge an initial purchasing fee, followed by a set-up/configuration charge, and then ongoing licensing/service charges.

22 http://www.challenging-ideas.com/wp-content/uploads/2018/12/ReDESIGNING_REGULATION-final-report.pdf

23 <https://www.gemserv.com/modernising-energy-governance-part-3-forging-ahead/>

24 <https://www.theguardian.com/environment/2018/nov/23/spark-energy-goes-bust-and-leaves-290000-without-a-supplier>

25 https://www.london.gov.uk/sites/default/files/energy_for_londoners_feasibility_study.pdf

26 <https://www.ofgem.gov.uk/publications-and-updates/entering-retail-energy-market-guide>

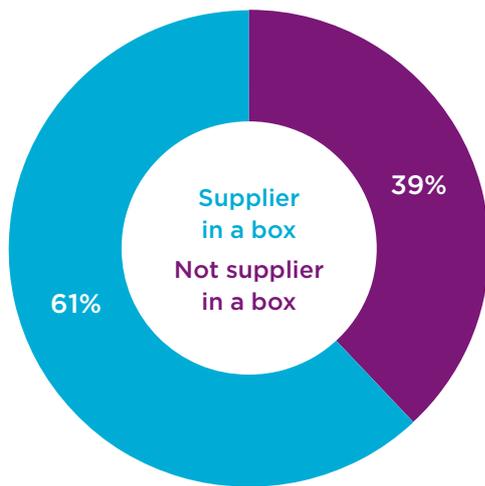


Figure 4: Share of domestic electricity suppliers that are SIAB

Route to market for domestic electricity suppliers

Of the 161 registered suppliers, 99 (61.5%) have entered the market via a SIAB route, see Figure 4. 42 (57%) of the total 74 active suppliers have entered the market via the SIAB route.

There are currently (as of June 18) 57 inactive ‘shell’ licensed supply businesses which have been established by SIAB vendors.

There are five companies active in creating SIAB companies. The five companies are listed in Table 3, together with their market share of licensed supplier businesses and active SIAB supplier businesses.

SIAB Vendor	Market share of licensed supplier businesses	Market share of active SIAB supplier businesses
Utiligroup ²⁷	46%	45%
Dyball Associates ²⁸	19%	14%
Utiliteam ²⁹	18%	17%
Ensek ³⁰	13%	24%
Crtichleys LLP ³¹	4%	0

Table 3: Supplier-in-a-box vendors

Of the 43 suppliers who entered the market in the last six years 27 (63%) have come via the SIAB route. This indicates the importance of this service in the recent period of high rates of new entry. Of the ten suppliers that have ceased to trade since June 2018, three are SIAB suppliers.

The recent Ofgem consultation on the review of supply licensing³² highlights the important role SIAB has played in supporting market entry and greater competition but emphasises that this route to market can bypass regulatory market entry tests which help to filter out potentially under-prepared and/or under-resourced participants. The reform proposals suggest moving when the regulator carries out the entry assessment of prospective suppliers to closer to

²⁷ <https://www.utiligroup.com/>

²⁸ <https://www.dyballassociates.co.uk/>

²⁹ <http://www.utiliteam.co.uk/>

³⁰ <https://www.ensek.co.uk/>

³¹ <https://www.critchleys.co.uk/>

³² https://www.ofgem.gov.uk/system/files/docs/2018/11/supplier_licensing_review_0.pdf

market entry³³. This would mean that the entity that will actually operate the supply business, and not the SIAB vendor, would be assessed. To date it is unclear what the impact of this will be on the viability of SIAB models. However our analysis indicates that suppliers licensed via the SIAB route do not present any higher risk of failure. Of the suppliers that entered SoLR arrangements in 2018, only 30% were set up through SIAB, despite SIAB accounting for 57% of active suppliers.

3.2 Value propositions of domestic supplier businesses

As of June 2018, there were 226 domestic dual fuel direct debit tariffs, around 100 more than in June 2017³⁴. The increase is only partly explained by the entry of new suppliers. After the removal of restrictions on tariff numbers and structure in 2016, the number of tariffs offered by each supplier, particularly the largest six suppliers, has increased.

3.2.1 Value proposition categories used in analysis

An initial analysis of the value propositions of domestic electricity supply business models was undertaken against the categories described in the Ofgem non-traditional business models (NTBM) consultation (see Table 4 for categories). A ‘traditional supplier’ category was also added to capture the incumbent business model.

On analysis of the active domestic electricity suppliers no examples of market propositions relating to Housing Associations³⁵ and peer-to-peer energy were found. Examples of the latter were found in emerging business models, covered in section 3.2.5

Table 4: NTBM value propositions used in supplier analysis

Value proposition	Description
Traditional supplier	The supplier offers a traditional tariff to customers (e.g. standard variable tariffs, fixed-term tariff, pay as you go, etc) where customer pays per unit of electricity consumed.
Community	The supplier offers a community energy service with emphasis on community ownership, leadership or control where the community benefits.
Municipal	The supplier is municipally-owned or offers energy related services to municipal organisations.
ESCO	The supplier offers a proposition related to energy services (e.g. heating services).
Multi-service providers (LISCO)	The supplier offers services in addition to energy provision (e.g. telecoms).
Market services	The supplier offers services to other market participants to help them operate within energy markets (e.g. power purchase agreements for community energy schemes).
Demand-side flexibility (DSF)	The supplier offers energy flexibility services such as demand-side response, energy storage and demand reduction.
Prosumers	The supplier offers services that help consumers become prosumers, including installation of microgeneration technologies and batteries.
Next generation intermediaries	Supplier offers services to help consumers switch.

³³ This would mean that prospective licensees would apply for a supply licenses after BSC and MRA qualification, rather than the current process where license applications are submitted prior to BSC/MRA qualification.

³⁴ https://www.ofgem.gov.uk/system/files/docs/2018/10/state_of_the_energy_market_report_2018.pdf.

³⁵ Although no exclusively housing association proposition was identified the analysis does include ‘Our Power’ which is a not-for-profit energy supplier owned by social housing providers, community organisations and local authorities.

During analysis of domestic electricity suppliers against the NTBM themes, a range of new or differentiated value propositions were discovered. In some cases, these provided more specificity on value propositions (e.g. TOUT and storage as a specific manifestation of demand-side flexibility) or represented a new value proposition (e.g. smart homes). The new value propositions and a short description are summarised in Table 5.

Value proposition	Description
Smart home	The supplier has a focus on smart meters or smart technology in home including smart thermostats and other connected devices.
Storage	The supplier is offering an energy storage product, such as domestic battery.
Time of use tariff (TOUT)	The supplier is offering a TOUT.
Electric vehicles (EVs)	The supplier is offering an EV proposition like leasing an EV, EV charger installation and EV specific tariffs.
Segmentation	The supplier actively targets consumer segments, such as homes on pre-payment meters.
Transparent	The supplier offers transparency into its business, for example in terms of customer numbers, funding and profits.
Energy choice	The supplier is offering its customers choice in where energy comes from, for example a specific wind farm.

Table 5: Additional value propositions for domestic electricity suppliers

3.2.2 Value propositions offered by domestic electricity suppliers

These additional value propositions were combined with the NTBM value propositions in an analysis of the active domestic electricity suppliers. Figure 5 below summarises the results of the analysis.



Figure 5: Number of active domestic electricity suppliers offering different value propositions

The analysis shows that most domestic electricity suppliers offer a traditional supply proposition³⁶. There are five active licensed domestic electricity suppliers that do not undertake traditional supply:

- Arto.energy Ltd specialises in automating the feed-in tariff submission process
- Brits Energy Ltd specialises in creating Community Power Plants
- Evenergi UK Ltd does not appear to be an active company
- Labrador Ltd is an automated switching service
- Mongoose Energy Supply Ltd specialises in bringing together local people and commercial developers to identify, develop, finance, build and manage community-owned, energy projects

It is not clear in each of the cases above why the company has a supply licence, although it may relate to keeping an option open for future value propositions. Beyond traditional supply there are no other common value propositions (e.g. propositions offered by majority of active suppliers). The value propositions offered by each of the active domestic electricity suppliers were analysed and are summarised in Figure 6.

³⁶ The total number of suppliers identified as offering a traditional supply proposition is lower than the 74 active suppliers identified in section 3.1 as suppliers who have exited the market since the start of analysis, or who hold multiple supply licenses, have been removed. As have the five suppliers who do not undertake traditional supply.

Value proposition

Figure 6: Value propositions offered by each active domestic electricity supplier

Supplier name	Traditional supplier	Community	Municipal	ESCO	MUSCO	Market services	DSF	Prosumers	Next gen TPIs	Smart home	Storage	TOUT	EVs	Segmentation	Transparent	Energy choice
Ampoweruk Ltd	•															
Arto.Energy Limited						•										
Avid Energy Limited	•															
Avro Energy Limited	•															
Better Energy Supply Limited	•															
Breeze Energy Supply Limited	•															
Brilliant Energy Supply Limited	•															
Bristol Energy Limited	•	•	•			•										•
British Gas Trading Limited	•			•			•			•						
Brits Energy Limited	•	•				•										
Bulb Energy Ltd	•	•				•										
Cardiff Energy Supply Limited	•															
Co-Operative Energy Limited	•	•		•	•											•
E (Gas and Electricity) Limited	•															
E.ON Energy Solutions Limited	•			•				•		•	•		•			
Economy Energy Supply Limited	•															
EDF Energy Customers Limited	•									•						
Effortless Energy Ltd.	•														•	
Electricity Plus Supply Limited	•				•											
ENGIE Power Limited	•		•	•			•	•								
Enstroga Ltd	•															
ESB Energy limited	•															
Evenergi UK Ltd	•															
Eversmart Energy Ltd	•															
Extra Energy Supply Limited	•															
First Utility Limited	•				•	•										
Flow Energy Limited	•															
GNERGY Limited	•													•		
Good Energy Limited	•	•				•	•				•					
Green Energy (UK) plc	•						•					•				
Green Network Energy Ltd	•													•		
Hartlepower C.I.C.	•	•						•					•			
I Supply Energy Limited	•															
Igloo Energy Supply Limited	•															
Labrador Ltd	•								•							
Logicor Energy Limited	•									•						
Mongoose Energy Supply Limited	•	•														
Nabuh Energy Ltd	•													•		
Npower Limited	•			•												
Octopus Energy Limited	•				•	•	•					•	•			
Oneselect Limited	•															
Orbit Energy Limited	•															
Our Power Energy Supply Limited	•		•											•		
OVO Electricity Limited	•	•	•		•	•	•	•		•	•		•			
People's Energy (Supply) Limited	•	•													•	
PFP Energy Supplies Limited	•															
Pure Planet Limited	•															
Robin Hood Energy Limited	•		•			•										
Scottish Power Energy Retail Limited	•			•									•			
Simplicity Energy Limited	•															
Snowdrop Energy Supply Limited	•															
So Energy Trading Limited	•															•
Solarplicity Supply Limited	•															
Spark Energy Supply Limited	•															
SSE Electricity Limited	•			•	•											
The Renewable Energy Company Limited	•	•	•			•	•						•			
Tonik Energy Limited	•				•			•		•	•		•			
Toto Energy Ltd.	•															
Usio Energy Supply Limited	•											•				
Utilita Energy Limited	•													•		
Utility Point Limited	•															
Zebra Power Limited	•															
ZOG Energy Ltd	•															

Figure 6 shows that many suppliers only offer customers a traditional supply proposition. However there is a significant number of suppliers offering additional 'non-traditional' propositions. These companies are summarised in Figure 7³⁷.

Value proposition

Supplier name	Community	Municipal	ESCO	MUSCO	Market services	DSF	Prosumers	Next gen TPIs	Smart home	Storage	TOUT	EVs	Segmentation	Transparent	Energy choice
Arto.Energy Limited					•										
Bristol Energy Limited	•	•			•										•
British Gas Trading Limited			•			•			•						
Brits Energy Limited	•				•										
Bulb Energy Ltd	•				•										
Co-Operative Energy Limited	•		•	•											•
E.ON Energy Solutions Limited			•				•		•	•		•			
EDF Energy Customers Limited									•						
Effortless Energy Ltd.														•	
Electricity Plus Supply Limited				•											
ENGIE Power Limited		•	•			•	•								
First Utility Limited				•	•										
GNERGY Limited													•		
Good Energy Limited	•				•	•				•					
Green Energy (UK) plc						•					•				
Green Network Energy Ltd													•		
Hartlepower C.I.C.	•						•					•			
Labrador Ltd								•							
Logicor Energy Limited									•						
Mongoose Energy Supply Limited	•														
Nabuh Energy Ltd													•		
Npower Limited			•												
Octopus Energy Limited				•	•	•					•	•			
Our Power Energy Supply Limited		•											•		
OVO Electricity Limited	•	•		•	•	•	•		•	•		•			
People's Energy (Supply) Limited	•													•	
Robin Hood Energy Limited		•			•										
Scottish Power Energy Retail Limited			•									•			
So Energy Trading Limited															•
SSE Electricity Limited			•	•											
The Renewable Energy Company Limited	•	•			•	•						•			
Tonik Energy Limited				•		•			•	•		•			
Usio Energy Supply Limited											•				
Utilita Energy Limited													•		

Figure 7: Value propositions of non-traditional suppliers

37 Note: Usio Energy Supply Limited ceased trading in October 2018 - its customers were transferred to First Utility via SOLR guidance.

3.2.3 Non-traditional domestic electricity supplier value propositions

The ‘non-traditional’ propositions summarised in Figure 7 were analysed to identify emerging non-traditional supplier business models. This was an analysis of clusters of value propositions from different suppliers. These clusters are summarised in Table 6 below. As Table 6 aims to capture emerging clusters of non-traditional business models only the companies from Figure 7 which are offering similar propositions are represented.

Cluster name and value propositions	Suppliers	Description
Local energy <ul style="list-style-type: none"> • Community • Market services • Energy Choice (for some) • Municipal 	<ul style="list-style-type: none"> • Bristol Energy Ltd • Brits Energy Ltd • Bulb Energy Ltd • Good Energy Ltd • Hartlepower C.I.C. • Mongoose Energy Supply Ltd • Ovo Electricity Ltd • So Energy Trading Ltd • The Renewable Energy Company Ltd: (Ecotricity) 	Focus on deployment or facilitating local energy including through investment in community energy schemes, facilitating market access (e.g. power purchase agreements with local energy schemes) and in some instances allowing consumers to choose specific local energy resources for their power.
Electric vehicle enablers <ul style="list-style-type: none"> • EV 	<ul style="list-style-type: none"> • EDF Energy Customers Ltd • Hartlepower C.I.C • Octopus Energy Ltd • Ovo Electricity Ltd • Scottish Power Energy Retail Ltd • The Renewable Energy Company Ltd • Tonik Energy Ltd 	Focus on offering a EV proposition like leasing an EV, EV charger installation and EV specific tariffs, to capture value in emerging EV markets.
Electrifiers <ul style="list-style-type: none"> • Prosumer • Storage • Smart home 	<ul style="list-style-type: none"> • EDF Energy Customers Ltd³⁸ • E.ON Energy Solutions Ltd • Logicor Energy Ltd • Ovo Electricity Ltd • Tonik Energy Ltd 	Focus on offering behind the meter technologies that enable consumers to become prosumers, including solar PV and batteries.
Flexibility unlockers <ul style="list-style-type: none"> • TOUT 	<ul style="list-style-type: none"> • Green Energy (UK) plc • Octopus Energy Ltd • Usio Energy Supply Ltd³⁹ 	Focus on providing TOUTs, varying price of electricity either half-hourly or in time bands.
Bundlers <ul style="list-style-type: none"> • MUSCO 	<ul style="list-style-type: none"> • Co-Operative Energy Ltd • Electricity Plus Supply Ltd⁴⁰ • First Utility Ltd • Octopus Energy Ltd • Ovo Electricity Ltd • SSE Electricity Ltd • Tonik Energy Ltd 	Focus on bundling other products together with electricity supply, including phone, broadband and mobile phone.
Potential ESCOs <ul style="list-style-type: none"> • Segmentation 	<ul style="list-style-type: none"> • British Gas Trading Ltd • Co-Operative Energy Ltd • E.ON Energy Solutions Ltd • Engie Power Ltd • Npower Ltd • Scottish Power Energy Retail Ltd • SSE Electricity Ltd 	Focus on providing services such as boiler homecare packages, installation of smart home technologies, such as smart thermostats. Whilst not yet offering energy as a service, are creating enabling conditions to do so later.
Segmenters <ul style="list-style-type: none"> • Segmentation 	<ul style="list-style-type: none"> • GNERGY Ltd • Green Network Energy Ltd • Nabuh Energy Ltd • Our Power Energy Supply Ltd • Utilita Energy Ltd 	Focus on specific consumer groups, often those on pre-payment meters.

Table 6: Emerging non-traditional electricity supplier value propositions

To examine how value propositions have evolved since Ofgem published its analysis on NTBMs in 2015, the emerging value propositions (Table 6) were mapped on to the three broad themes identified by Ofgem – local services, bundled services and customer participation. This is shown in Figure 8.

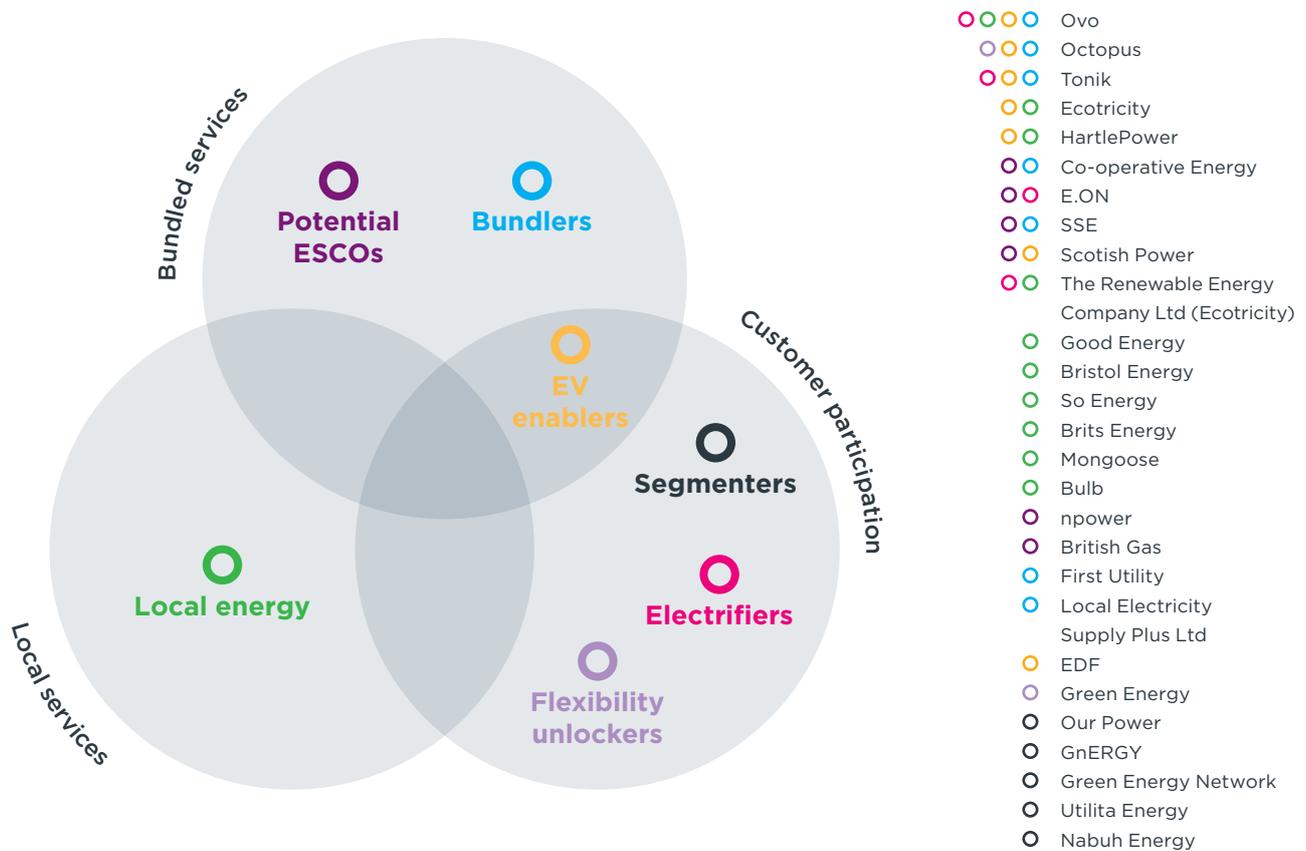


Figure 8: Emerging domestic electricity supplier value propositions compared to broad NTBM themes

The emerging value propositions of domestic electricity suppliers map well onto the three themes from outlined in the Ofgem NTBM discussion paper. Several of the emerging value propositions are similar those identified in the original NTBM paper, including local energy, ESCOs and bundled services, although in all cases the number of providers is greater.

In particular, value propositions in the **local services** cluster were revealed to be significant, incorporating an increased number of value propositions which either support local energy generation or allow consumers to choose specific local energy resources for their power. Our analysis adopted a narrow definition of 'local energy' as companies deploying or facilitating local energy directly. For example offering customers locally generated renewable energy tariffs. However if a wider definition of local energy is included, to include all value propositions either supporting local energy or offering other local value (for example municipal and local non-for-profit models), then this value proposition emerges as even more

38 Note: EDF is a new entry to this category - they announced a link with Powervault in November 2018

39 Note: Usio Energy Supply Ltd ceased trading in October 2018 and its customers were transferred to First Utility. It is unclear whether First Utility will offer the TOUT offered by Usio.

40 Supplies electricity to Utility Warehouse

significant, particularly if municipal ‘white label’ supply arrangements are taken into account. Whilst an assessment of the customer numbers opting for these local value propositions has not been undertaken the prevalence of such business models suggests that there is a significant consumer appetite for more localised energy values.

In the retail energy market, a ‘white label’ is an organisation that does not hold a supply licence, but instead works in partnership with a licensed ‘partner supplier’ to offer tariffs under the white label brand⁴¹. There are four main suppliers that offer white labels. Of these, Robin Hood Energy Ltd and Ovo Electricity Ltd are the most active. Of a total of 14 white label arrangements, nine market themselves, at least partly, on a local benefits rationale, largely through partnerships with local authorities.

Licensed Partner Supplier	White Label
OVO Electricity Limited	<ul style="list-style-type: none"> • Fairerpower • Peterborough Energy • Southend Energy • EnergySW
Robin Hood Energy Limited	<ul style="list-style-type: none"> • Angelic Energy • Great North Energy • Ram Energy • Your Energy Sussex • White Rose Energy • Liverpool Energy Community Company (LECCY) • Citizen Energy • EBICO
Octopus Energy Limited	<ul style="list-style-type: none"> • M&S Energy
British Gas Trading Limited	<ul style="list-style-type: none"> • Sainsburys Energy

Table 7: White label suppliers and licensed parent suppliers

Local energy value propositions are also a strong theme within innovation with Ofgem identifying local energy models as a clear feature of applications to their Regulatory Sandbox⁴². Of the seven trials supported since 2017 all but one seek to maximise the benefits of locally-produced (and sometimes stored) electricity for local consumers. Some of the trials also plan to explore the use of platforms to facilitate peer-to-peer energy trading (see section 3.2.5).

41 <https://www.ofgem.gov.uk/publications-and-updates/white-label-providers-consultation>

42 https://www.ofgem.gov.uk/system/files/docs/2018/10/insights_from_running_the_regulatory_sandbox.pdf

At the same time there has been growing consensus that whole system approaches to decarbonisation across power, heat and transport are likely to require greater understanding of local conditions in order to optimise local resources across vectors⁴³⁴⁴. However, whilst there has been significant growth in the range and number of local value propositions (including those which support local energy generation, allow consumers to choose specific local energy resources or which reinvest profits in local communities), there is limited evidence of links to other value propositions such as **flexibility unlockers**, **EV enablers** or **electrifiers**. **Local energy services** models therefore appear to currently be focussed on connecting local generation and demand, together with delivering social objectives, rather than tariffs related to time-of-use, storage or other sources of flexibility.

Offerings in both the bundled services and consumer participation segments have diversified since 2015. In particular the '**EV enablers**' cluster has greatly expanded. This is likely to be linked with increasing confidence in the deployment of EVs and the opportunity to create new value for traditional utilities through supplying electricity and wider EV services (such as leasing and charging infrastructure). All EV tariffs are currently 100% renewable energy, many also provide charging infrastructure and in some cases they are offering time-of use or smart tariffs.

Despite the diversification of value propositions in the consumer participation cluster the analysis reveals that there are relatively few consumer offerings related to flexibility. Additionally few suppliers offer a combination of services relating to time-of-use tariffs (**flexibility unlockers**) and technologies to support flexibility (e.g. electric vehicles (**EV enablers**) or behind the meter generation and storage technologies (**electrifiers**)).

The limited extent of value propositions based on flexibility is supported by Ofgem's State of the Energy Market 2018⁴⁵ report which indicates that there was only a small increase in the number of available smart tariffs in 2018, with smart tariffs representing approximately 5% of total dual fuel tariff offers. Additionally, most smart tariffs on offer are static, involving cheaper tariff rates during pre-determined periods of time, rather than dynamic time-of-use tariffs which reflect changing costs day by day or hour by hour. Such tariffs continue to be limited by the slow roll out of smart meters and current settlement rules which do not incentivise half hourly settlement. As Ofgem suggests 'in the absence of half-hourly settlement, suppliers tend to have limited incentives to offer time-variable prices as they cannot capture the commercial value of shifting usage away from peak demand periods'⁴⁶. A programme of half hourly settlement reform is currently ongoing within Ofgem and BEIS, however progress is slow.

43 <https://es.catapult.org.uk/wp-content/uploads/2018/12/Local-Area-Energy-Planning-Supporting-clean-growth-and-low-carbon-transition.pdf>

44 <http://projects.exeter.ac.uk/igov/new-thinking-multi-level-coordination-and-governance-in-the-energy-revolution/>

45 https://www.ofgem.gov.uk/system/files/docs/2018/10/state_of_the_energy_market_report_2018.pdf

46 https://www.ofgem.gov.uk/system/files/docs/2018/10/state_of_the_energy_market_report_2018.pdf

3.2.4 Supplier partnerships with device vendors

Some suppliers are starting to reach behind the meter into households and small businesses, for example the **electrifier** value proposition in section 3.2. To do so suppliers are creating new partnerships with device vendors. This is captured in Table 8.

Behind the meter technology	Device Vendor	Supplier(s)	Service
Digital Assistants	Amazon Alexa	British Gas EDF	Ability to access account information via digital assistant
	Google Home	First Utility	Ability to access account information via digital assistant
Home energy management system	Hive	British Gas	Offer range of Hive products and home contracts.
	Netatmo	EDF	EDF offers range of Netatmo products
	Nest	Engie First Utility	Both offer a tariff that comes with a free Nest thermostat
	Tado	SSE	SSE markets the Tado smart thermostat
	Honeywell	Scottish Power	Can buy and book installation via Scottish Power website.
EV charging	Myenergi	Octopus Energy	Partnership to bring customers the Zappi smart charger.
	Eomini	Tonik Energy	Partnership to bring homes the smallest fast home EV charger.
	Ovo Energy	Ovo Energy	Domestic scale V2G EV charger (Ovo's own)
Electric heating	Logicor Clear Heater	Logicor Energy	Flex Discount tariff if the customer has a Logicor heater installed, including discounts for customers who provide high level of flexibility.
	Ovo Energy	Ovo Energy	VCharge gives smart heating control to electric storage heaters.

Table 8: Domestic supplier partnerships with device vendors

Whilst several suppliers were found to offer batteries, details on the device vendor was only clear with Ovo (own brand) and EDF (Powervault).

The range of devices represented above mean that suppliers potentially have much greater presence behind the meter in homes and businesses. Also, given the connected nature of many of the devices, they potentially offer the supplier greater insight into consumer energy use and behaviour.

To date many of the device vendor partnerships have tended to be between medium-large energy suppliers and large, multi-national device vendors. This is particularly the case for digital assistants and home energy management systems. Given the importance of these partnerships for the development of the bundled and consumer participation value propositions this may provide insight into the future development of these value propositions.

Many within the industry anticipate that there will be a growing trend towards behind-the-meter solutions within the domestic sector. The development of device vendor partnerships may therefore be an important space in the coming years, particularly as a route for people to become more engaged within the energy system. In contrast, given that the current licence conditions stop at the meter, it could also be an area where new consumer problems arise and therefore an area where increased regulatory attention is required in future.

3.2.5 Emerging business models

Several suppliers are trialling new business models along with partners, enabled by initiatives such as the Ofgem Regulatory Sandbox. This section covers peer-to-peer (P2P) energy and flexibility marketplaces. Peer-to-peer trials are summarised in Table 9 and flexibility marketplaces are summarised in Table 10.

P2P trials

Four P2P trials were identified; three through the Ofgem Regulatory Sandbox and one from Piclo, initially funded via BIES.

Trial name and key supplier	Partners	Description
Piclo P2P energy matching Supplier: Good Energy Ltd	Piclo (formally known as Open Utility)	Piclo have created a service for energy retailers who want to build a new business customer proposition around local energy. It matches generators with businesses, including allowing businesses to choose specific generators. The service is marketed by Good Energy as “Selectricity ⁴⁷ ”.
Brixton P2P trial Supplier: EDF	Shell, Electron, National Grid and Siemens, Baringa, Flexitricity, Kiwi Power, Northern Powergrid, Open Energi, Statkraft and UK Power Networks.	There is little detail on this project, the following is taken from the Ofgem Regulatory Sandbox ⁴⁸ . <i>A consortium led by EDF Energy R&D UK and including Electron, PassivSystems, Repowering London and University College London are trialling a peer-to-peer local energy trading platform. The platform aims to allow residents in urban areas to source their energy from local renewables and trade that energy with their neighbours, increasing self-consumption of low carbon energy and reducing overall energy costs.</i>
Empowered Supplier: Not known	Not known	There is little detail on this project, the following is taken from the Ofgem Regulatory Sandbox ⁴⁸ . Trialling a local peer-to-peer energy trading scheme. The trial aims to enable consumers to trade electricity directly with each other and yield benefits for the local community and the wider electricity system.
Hackney Banister House Estate Supplier: British Gas (Centrica)	Verv Repowering London Powervault	This trial aims to allow residents to benefit more directly from the solar by reducing the cost of their electricity. Verv and British Gas will trial a new arrangement that maximises the benefits from local generation and tests peer-to-peer electricity trading across a distributed ledger platform. The trial executed the UK’s first physical trade of energy on the blockchain in April 2018 ⁴⁹ .

Table 9: Peer-to-peer energy trials

47 <https://www.goodenergy.co.uk/selectricity/>

48 https://www.ofgem.gov.uk/system/files/docs/2018/09/outcome_of_sandbox_window_1.pdf

49 <https://verv.energy/weve-just-executed-the-uks-first-energy-trade-on-the-blockchain-as-we-look-to-power-a-london-social-housing-community-with-sunshine/>

Flexibility marketplaces

Trial name and key supplier	Partners	Description
Centrica Cornwall Local Energy Market Supplier: Centrica (British Gas)	Western Power Distribution, National Grid, Exeter University, Imperial College London	The trial in Cornwall will create a virtual marketplace that will provide participants with a platform to buy and sell energy and flexibility both to the grid and the wholesale energy market.
Piclo Flex Supplier: No electricity supplier, Piclo operates this service	UK Power Networks, Scottish & Southern Electricity Networks, Electricity North West, SP Energy Networks, Northern Powergrid, Western Power Distribution	Piclo Flex is an independent marketplace for buying and selling smart grid flexibility services. The platform runs flexibility auctions and matching algorithms.

Table 10: Flexibility marketplace trials

The presence of grant funding or the ability to test emerging business models outside of the normal regulatory environment (such as through Ofgem’s Regulatory Sandbox) appear to be important factors in enabling the development of innovative trials. These emerging business models also demonstrate an interest by suppliers, and other energy market participants, in capturing new value through direct P2P trades from the growing cohort of prosumers. The ability of these emerging business models to operate outside of a protected regulatory ‘carve out’ is dependent on much wider reforms to the supplier hub model, including the development of accessible value streams and markets for flexibility. This issues are discussed further in the University of Exeter Energy Policy Group working paper on ‘Policy and Regulatory Barriers to Local Energy Markets in Great Britain’⁵⁰.

4 Conclusions

This report, together with the [associated spreadsheet and introductory report](#), provides an analysis and segmentation of consumer-facing energy business models in the UK domestic retail market. It builds on the analysis undertaken by Ofgem in 2015 on non-traditional business models (NTBMs), which segmented business models into three main themes and nine sub-themes.

The findings indicate that although competition in the retail energy market has increased considerably in recent years barriers to entry and growth remain. Nearly two thirds of new domestic suppliers in the last six years have entered the market via simplified routes such as supplier-in-a-box, indicating that issues such as code compliance and industry data flows are likely to remain as barriers to entry. Similarly, despite high market entry a low number of suppliers have achieved a greater than 1% market share.

⁵⁰ [http://geography.exeter.ac.uk/media/universityofexeter/schoolofgeography/images/researchgroups/epg/Bray-Unlocking-Local-Energy-Markets_\(002\).pdf](http://geography.exeter.ac.uk/media/universityofexeter/schoolofgeography/images/researchgroups/epg/Bray-Unlocking-Local-Energy-Markets_(002).pdf)

There has been a recent spate of domestic supplier failure, with customers transferred to new suppliers under Ofgem's Supplier of Last Resort guidance. Of the ten suppliers that have entered SoLR since this analysis began, according to our analysis, three have come via the SIAB route. Ofgem has indicated that they will apply greater financial scrutiny on new entrants in the future. However the impact of these proposed reforms, including on SIAB models, is currently uncertain.

An analysis of the value propositions of domestic and non-domestic suppliers was undertaken. In both cases the themes of the Ofgem's NTBM discussion paper were used for an initial segmentation and then more specific or new themes were identified through analysis of the business models in greater depth.

The business models active in the market were found to map well against the three broad themes identified in the NTBM analysis – local services, bundled services and customer participation. Additionally a number of new and more specific themes were also evident. Segmentation analysis of the emerging business models revealed seven clusters of value propositions – local energy; EV enablers; electrifiers; flexibility unlockers; bundlers; ESCOs; and segmenters.

Several of these segments were already evident in 2015 when the NTBM analysis was undertaken, including local energy, ESCOs and bundlers. In all cases the number of businesses offering these services has increased. In the case of local energy, new aspects have been added, including offering customers choice over the specific local energy resources they get their power from. Local energy services was revealed to be a particularly active area of value proposition development in recent years.

Several suppliers are exploring propositions to take advantage of increased electrification of transport through providing including electric vehicle leasing, charging infrastructure and tariffs. This potentially indicates growing confidence in the transition to EVs and a recognition of the new value available to electricity suppliers (and other businesses) through EVs as a flexibility resource.

Increasing numbers of (mainly medium-large) suppliers are exploring models to create more prosumers, by selling home microgeneration and storage technologies, such as PV and batteries. Whilst this creates a new value proposition for suppliers, it is also in opposition to the traditional commodity-based business model, as these technologies reduce consumer demand for electricity. Propositions such as EV enablers and electrifiers are also broadening supplier relationships with device vendors, including digital assistants, home energy management systems, EV charging infrastructure providers, electric heating, solar PV and batteries.

Whilst there is considerable innovation in value propositions, particularly in relation to local energy and electric vehicles, there is limited development of smart, flexibility-based consumer offerings. This is largely due to slow progress in the smart meter roll-out, a lack of half hourly settlement, and the persistence of the supplier hub model. Many of these challenges have been recognised by government and Ofgem. In their 2017 call for evidence on future supply market arrangements Ofgem emphasised that the current energy market is not well designed to integrate microgeneration, energy storage, electric vehicles and smart appliances. In 2018 Ofgem concluded that the current supplier hub model is not

fit for purpose for energy consumers over the longer-term and committed to reform of retail market structures⁵¹. Whilst these reforms are welcomed the nature of such far-reaching reforms inevitably mean that there is a lack of regulatory and policy clarity in the short-term which can undermine the development of innovative consumer propositions⁵². For example during the period over which this analysis was conducted several important decisions were made, or reviews initiated, that could have implications for future energy value propositions. These include an Ofgem-led review of the supply licences⁵³, the BEIS announcement of a review of the industry codes⁵⁴, the creation of energy data⁵⁵ and EV taskforces⁵⁶, the ongoing BEIS and Ofgem Smart Systems and Flexibility Plan⁵⁷, the recently announced energy trials and design projects funded through the Industry Strategy Challenge Fund⁵⁸ and the Ofgem Targeted Charging Review⁵⁹ and reform of network access and forward-looking charges.

Suppliers are also engaging in innovation activities and trials, including seeking derogations from Ofgem to undertake these through the Regulatory Sandbox. These include peer-to-peer electricity trading and flexibility platforms. There are a range of regulatory, technical and industry code-related reasons why peer-to-peer is being trialled in a protected regulatory space and the further role out of such innovations is closely linked to wider market reforms.

Overall, whilst there has been increased market entry and expansion of value propositions in recent years, the core business model in the domestic retail market is still very much predicated on a volume commodity basis and prescribed by the current supplier hub licensing and code compliance regime. The UK retail market is on the cusp of many radical changes – relating to the structure of licensing, the role of suppliers, network charging and electricity settlement – however many of these changes are yet to be fully implemented and the next two to three years are likely to be a critical period for UK energy system transformation. Increasingly interactions across heat, power and transport, as well as across networks, supply and demand, will become more complex highlighting the need for coordinated reform of energy governance. For more information on the IGov project’s recommendations for GB energy governance reform please see [here](#) and [here](#).

51 <https://www.ofgem.gov.uk/publications-and-updates/future-supply-market-arrangements-response-our-call-evidence>

52 Cornwall Insight, 2018, 'Electric Vehicles: Driven to Disruption'

53 <https://www.ofgem.gov.uk/publications-and-updates/ofgem-reviews-supplier-licensing-regime>

54 <https://www.gov.uk/government/speeches/after-the-trilemma-4-principles-for-the-power-sector>

55 <https://www.gov.uk/government/groups/energy-data-taskforce>

56 <https://www.lowcvp.org.uk/projects/electric-vehicle-energy-taskforce.htm>

57 <https://www.gov.uk/government/publications/upgrading-our-energy-system-smart-systems-and-flexibility-plan>

58 <https://www.gov.uk/government/news/energy-systems-of-the-future-local-communities-to-benefit-sooner>

59 <https://www.ofgem.gov.uk/electricity/transmission-networks/charging/targeted-charging-review-significant-code-review>



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