3. b Creating value: Tiered Value Propositions

In an energy systems context, the value that is created and exchanged can be wider than a simple 'customer-seller' exchange. In Project LEO we demonstrated how flexibility services have the potential to deliver a wide range of direct and indirect benefits to system users, the network operators and the wider community. Our tiered benefits template encourage service developers to consider the wider societal and system level value that is delivered by users in exchange for the benefits they receive when using a service.

Useful for

- Considering the roles a system user may play in relation to more complex 'energy system' services.
- Identifying the benefits they may gain in relation to those wider roles they are playing.
- This is a particularly useful technique for flexibility and Smart Community Energy Scheme services where there may be multiple services at play.
- Putting system user benefits into the context of the wider community and energy system.

How it works

Flex provision usually involves two different services that need to work together to deliver flex successfully into a market:

- 1. The provision of flex into the energy system.
- 2. The flexibility-enabling service, or 'route to market' which enables that flex to be unlocked.

For example, when a householder temporarily turns off their appliances to reduce demand, they are providing a service to the energy system: "Demand-Side Flexibility". In order for them to be able to deliver this service, they need to have signed up to a flex-enabling service provided by either an energy supplier or a third-party provider that enables them to sell their flexibility.

Flex provision therefore is not a simple transaction between two parties. There are multiple stakeholders involved in flexibility, all of whom can potentially derive benefit from increased active participation of users at the grid edge and the costs and benefits need to be distributed between the different stakeholders in these services.



Another important factor to bear in mind is that for many at the grid edge, providing flexibility to the system is unlikely to be a core activity. Rather it is a secondary by-product of a more valued service, or a core activity people are already undertaking. For example, householders don't purchase an air source heat pump to enable them to participate in flexibility services. Any flexibility these pumps provide will be a secondary by-product of the core purpose of heating homes.

As a result, a layered approach was used to build the value proposition for a service offering, based on a number of different roles service users might adopt. The value proposition then considered how a service might benefit a participant depending on the role that participant was playing. The roles considered were defined as follows:

• Daily jobs

These are the day-to-day tasks that are central to energy system users' daily lives, many of which are already being achieved thanks to their interaction with that system. How can we offer a service that relieves the pains or generates gains in relation to these core jobs? For example, a more cost-effective way to heat their homes for householders or enabling greater self-consumption of rooftop solar PV generation to reduce overall energy bills.

• Flex provider

This is the job that we want system users to do for us, from a Project LEO and grid edge balancing perspective. So how can they directly benefit from delivering the flexibility we need when they stop being simply 'system users' and become 'flex providers'?

• Community member

How might the service be perceived to deliver value to the wider community in which they live, a value that the service user too may directly or indirectly benefit from? For example, reducing local parking issues, supporting their local school, avoiding the road being dug up, reducing the risk of black-outs or doing their bit to tackle climate change.

• Trial participant

In the context of Smart and Fair Neighbourhoods we also needed to consider another 'job to be done' – that of taking part in our trials, and the additional rewards or pains that this might accrue. In such trials one needs to be aware that, when a value proposition is heavily weighted to the benefits accruing from an individual's role as a trial participant, this may affect the ease of replication in a non-trial scenario where the same cost-benefit balance is not achievable or realistic. It is important therefore to identify which benefits arise purely because of the trial situation.

For some participants there may be a high level of overlap between these roles, for others none at all.

There are two additional sets of benefits that will be generated:



• Community level benefits

These may be directly energy system related, for example, shifting peak demand may free up space for other people in the immediate community to install EV chargers or solar PV arrays. Alternatively, they could relate to a wider range of benefits in relation to jobs, economy, income, transport, noise, congestion, air quality, health, wellbeing, support, public amenities, community cohesion, green spaces, biodiversity.

By identifying what additional value could be created, and then identifying benefits, and what they may be prepared to give in exchange for these benefits increases the potential for a sufficient value to be generated by the service for it to become attractive to operate. Some, but not all community level benefits may be directly valued by the service user themselves. Identifying a potential benefit doesn't necessarily translate into identifying anyone willing, or able, to pay for that benefit.

• System level benefits

Finally, the flexibility that the service results in, created benefit to the energy system – reducing and shifting peaks in demand, for example. Whether the system places sufficient financial value on the provision of that flexibility will be a key factor in whether a service can be sufficiently desirable or commercially viable to deliver.

What next?

Any potential service user will balance the potential benefits derived from using the service, against the cost of participation. Section 4 helps tease out the financial and non-financial costs that might be incurred.



Creating Value: Tiered benefits

How can our value proposition offer gain creators or pain relievers in relation to four different roles people might play - how can it help them achieve their 'jobs to be done'? Use squares for jobs or tasks and circles for the associated benefits. Once completed, put stars against the three benefits you believe will be considered of most value by the service user.

FLEX PROVIDER BENEFITS

Daily jobs



Day-to-day tasks that are central to their daily lives eg reduce my heating bills Prompts: Cost reduction (upfront/ongoing); Income; Time; Access; Performance; Convenience; Usability; Risk; emotional; social; status; information

Flex provider



This is the job that we want system users to do for us, delivering flexibility, what benefits accrue from the provision of flex?

Prompts: Cost reduction (upfront/ongoing); Income: Time: Access: Performance; Convenience; Usability; Risk; emotional; social; status

Community member

Benefits delivered to the wider community that the flex provider also values



Prompts: Jobs, economy, income, transport, noise, congestion, air quality, health, well-being, support, public amenities, community cohesion, green spaces, bio-diversity, grid connections and capacity

Trial Participant



Additional benefits that arise as a direct result of participating in the trial Prompts: Cost reduction: Income; Time; Access; Performance; Convenience; Usability; Risk; Emotional; Social; Status; Information

COMMUNITY BENEFITS

Value created for the wider community.

Prompts: Jobs, economy, income, transport, noise, congestion, air quality, health, well-being, support, public amenities, community cohesion, green spaces, bio-diversity, grid connections and capacity

SYSTEM BENEFITS

Benefits delivered to the energy system



Prompts: Permanent or temporary reduction in energy use; storage; generation; Shift in time of demand



