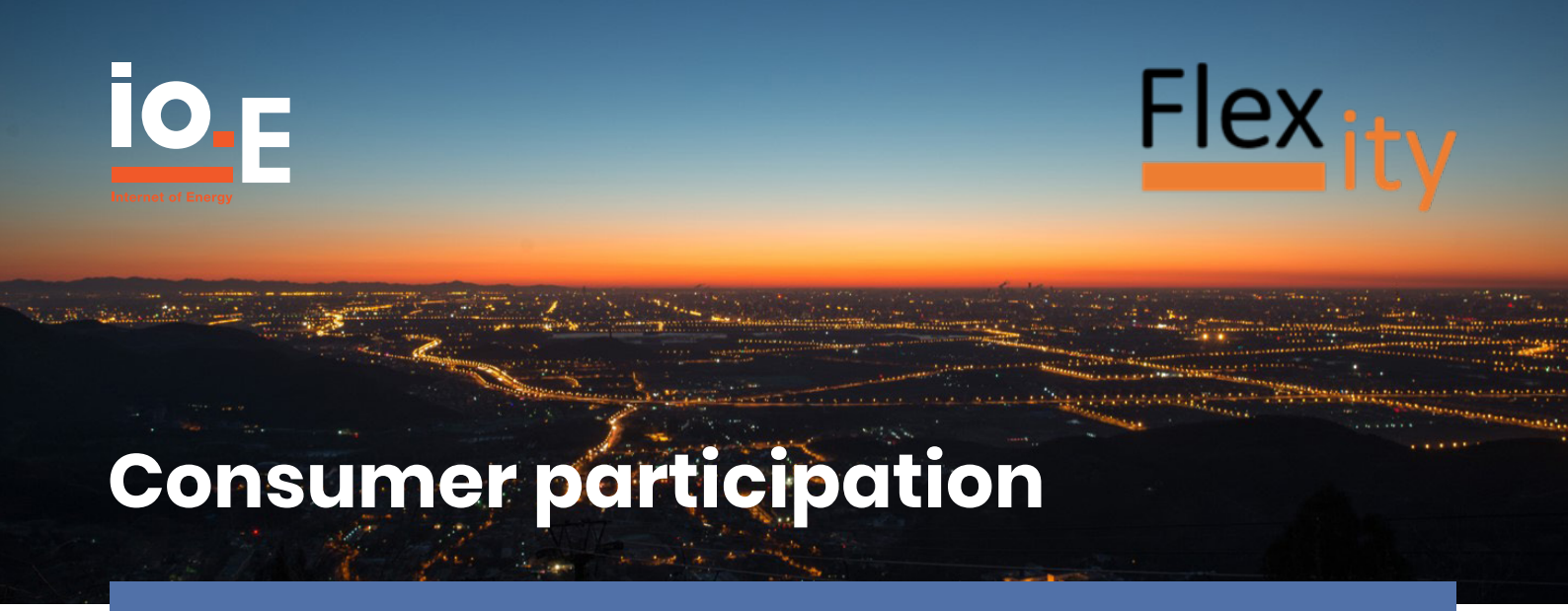


Consumer participation

What is Flexity: Flexity is one of the leading Use Cases within the IO.Energy Ecosystem. Flexity investigates which household assets (EVs, boilers...) can be technically operated and which value can be offered to the end-consumer in return. Moreover, Flexity investigates how the digital meter can be used to facilitate the settlement of new services on residential level.

Objective of this note: this note summarises the result of a survey Flexity conducted with its participants. This survey aimed to capture the underlying motivations for participations and the desired benefits from allowing device control from a third party.

Executive summary

Flexity participants were mainly attracted by the technological aspect (having something new and trendy) or by the fact that the optimisation helps them lower their monthly costs. Simply being more ecologically friendly was not considered the most important parameter for participation.

Following this, Flexity participants showed willingness to pay for the service under the condition that they have a short payback time, but this should be confirmed using a larger sample. It should be noted that an upfront investment from the end-user is not the only business model possible and that initial costs can also be covered by the service provider.

Approach of the consumer survey

Consumer appetite and the drivers for participation were investigated by means of a survey distributed amongst those participants where physical installations took place[1]. 11 out of 14 tiko users participated in the survey and 3 out of 4 Voltalis users participated. This survey was built to validate following working assumptions:

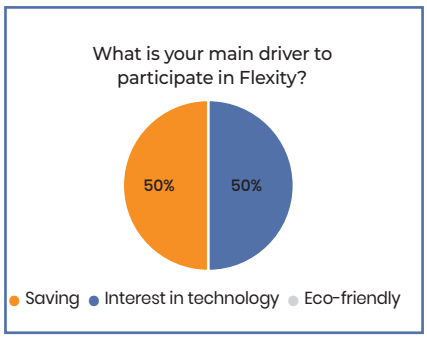
	Hypotheses
Motive for participation	**H1:** Consumers want to actively contribute in the energy transition because of environmental reasons
	H2: Consumers want these digital monitoring tools
	H3: Consumers are driven by energy bill savings (/earnings)
Willingness to pay	**H4:** Consumers are willing to pay for a service that allows them to monitor their appliances, save on energy expenses while contributing in the energy transition
Technical validation	**H5:** we can operate household assets remotely without impacting comfort limits
GDPR / Data privacy	**H6:** End-prosumers are willing to share individual data with Flexity

1. The survey was distributed amongst tiko and Voltalis users, Jedlix users were not part of the survey

Results

Motive for participation

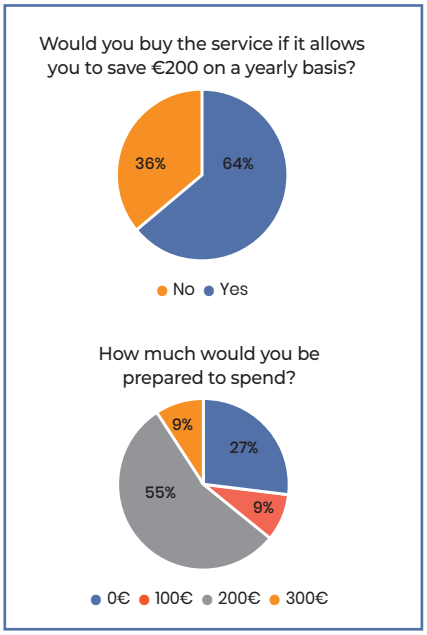
Flexity participants are mostly driven by their interest in technology and the potential savings and revenues, thanks to the optimisation of their flexible assets. It is worth noting that the high interest in technology is most likely explained by the fact that participants are early adopters who have a natural interest in technology.



Willingness to pay

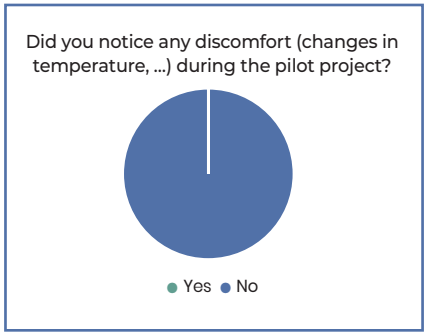
A major part of the participants (64%) is willing to pay for the service[1] if this helps them save 200€ annually.

The results also show that a non-negligible part (36%) of the participants are not willing to pay an upfront fee for a future service. For those participants all costs should be fully covered by the service provider. Hence, the service provider needs to ensure he can earn back this upfront investment by valorising the residential flexibility on the market. Low entry barriers (hence low entry costs) for residential flexibility is thus of critical importance to enable SPs to bring this flexibility to the market.



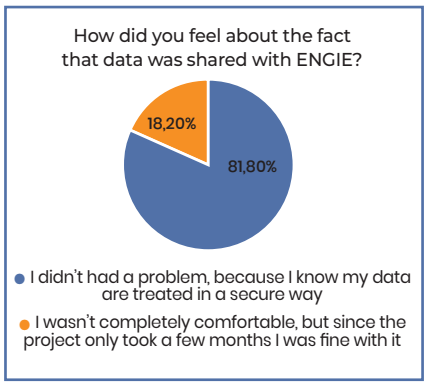
Technical validation

None of the participants indicated that their comfort limits were affected. Service providers in Flexity where therefore able to operate a residential load without affecting comfort limits. This is also confirmed by the consumer feedback from tiko and Voltalis in Switzerland and France, respectively.



GDPR and data compliancy

82% of the respondents did not have any problems that personal metering data were shared with ENGIE. When customers see a benefit to subscribe/use a service, the data sharing and privacy is therefore not considered a barrier if required to enable a smart service. Not forgetting that although Flexity was only a pilot project, data of end-users was handled in accordance with strict GDPR requirements. The results of the survey show that this reassurance is important for end-consumers who expect their data to be taken care of in a secure way and trust their Supplier to do so accordingly.



1. It should be noted that not all business models require an upfront investment of the end-consumer. Service providers could for instance provide the infrastructure and tools for free to the end-consumer under the condition they can operate the flexibility while guaranteeing comfort levels.

Conclusion and moving forward

Flexity conducted a small survey with its participants to better understand the motivations for participation. Respondents were limited (only 14) and were mainly early adopters who typically show a natural interest in new innovations. A wider market study with a range of participants is therefore needed to better understand the drivers of an average Belgian household. Such market study should not only map the overall motivation of end-consumers to participate in new services but should also continue to further investigate the consumer willingness to pay for such a service.

Annex

	Hypotheses	Results
Motive for participation	**H1:** Consumers want to actively contribute in the energy transition because of environmental reasons	Not yet validated
	H2: Consumers want these digital monitoring tools	Yes, validated
	H3: Consumers are driven by energy bill savings (/earnings)	Yes, validated
Willingness to pay	**H4:** Consumers are willing to pay for a service that allows them to monitor their appliances, save on energy expenses while contributing in the energy transition	Validated, but a wider market study is needed
Technical validation	**H5:** We can operate household assets remotely without impacting comfort limits	Yes, validated
GDPR / Data privacy	**H6:** End-prosumers are willing to share individual data with Flexity	Yes, validated