

Engaging the end user

Including end users in the equation is crucial to balancing supply and demand in an energy efficient way. Smart metering technology allows district heating utilities to target poor user behavior and lets consumers take an active part in achieving a sustainable energy future.

Poor user behavior by individual end users can put stress on the distribution network and have a negative impact on the entire system. Truly engaging end users to take energy efficient action is, however, not an easy task and it will require district heating utilities increasingly taking on the role of advisors.

Consumers at the core

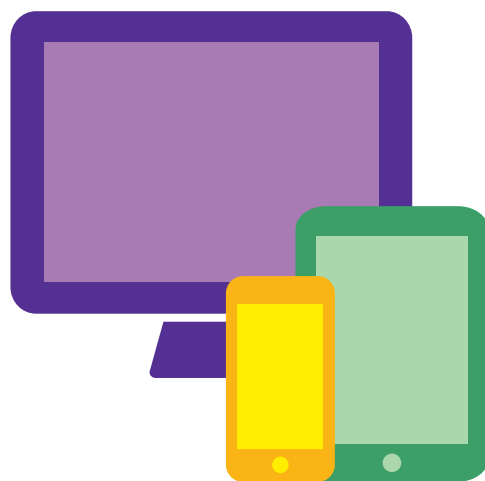
When comparing the same type of buildings, the energy consumption will often differ by a factor 2 or 3 – or more if you compare the energy consumption per m². If you focus on the volume rather than the energy, there can easily be a factor 10 difference in the amount of hot water that must be pumped out to two identical buildings. As the building stock is the same, these differences are directly related to behavior, which is why it is important to get the end users involved, when energy efficiency is concerned.

The European Energy Union places consumers at its very core. They must be both allowed and enabled to participate actively and take responsibility for their part of the energy transition. This involves providing them with solutions and tools to reduce their energy consumption and make sustainable energy choices.

End-user engagement within reach

In general, engaging end users in their energy consumption has proven difficult, but new opportunities are on the way. Smart metering coupled with advanced data analytics enables a new level of end-user engagement. Also, utilities that are able to reposition themselves as energy advisers helping end users save energy and money, will be rewarded with a higher level of trust and commitment from their customers.

Metering and frequent data are needed to educate end users on the consequences of their energy behavior. A number of solutions are already available that allow end users to follow their consumption by the hour and to benchmark how they compare to other end users with similar profiles.



Alternative billing schemes could also be a way of motivating customers. Maybe in the future, end users will be billed based on their degree of flexibility rather than their consumption of energy – perhaps combined with peak rates, power limitation and penalties for excessive use.

Individual end users can get advice and guidance based on their personal user behaviour and specific property type. For example, knowing that a building consistently performs poorly when cold winds blow from the west, or that it would be profitable to replace certain windows so they can absorb more solar energy, would allow district heating utilities to act more proactively and provide customer-specific guidance.

Utilities could also offer online energy management services or even consider taking responsibility for operating the end user's heat installation in the most energy efficient way.

Creating exactly the right incentives is a prerequisite for engaging end users and making them more flexible and energy efficient. This calls for a wider variety of products and services on the shelves of utility companies – and just as importantly, it calls for frequent meter data in order for utility companies to be able to evaluate their effect.

