

OUR VIEW AND PROPOSALS ON SELF-CONSUMPTION

OUR VIEW

Our territory has the ideal conditions for the installation of self-consumption systems in homes, companies and public administrations.

Nowadays the process of changing traditional patterns in energy production and consumption becomes a reality. One of the main aspects of this evolution is the appearance of small and decentralized installations for energy production linked to the points where it is consumed.

The gradual incorporation and generalization of self-consumption facilities in our homes, companies and institutions, will mean, in the medium and long term, a change of approach in the chain of production, transportation, distribution and consumption of electricity, because the consumer himself executes all these functions in a unique and integrated way.

The final consumer plays a key role in these technologies and the European Commission has already begun to refer to this new agent as a figure with its own entity. In this way producers-consumers of electric energy will be hereinafter referred to as "**Prosumers**".

The European Commission explicitly highlights the advantages of self-consumption facilities in its energy measures package "*Clean Energy for All Europeans*", brought out in December 2016 and known as the "**Winter Package**".

Therefore, these facilities constitute a true milestone in the evolution towards a new energy model where the principle of **energy democratization** is called to play a determining role.

Self-consumption, especially from solar photovoltaic (PV) energy, can become one of the main alternatives to increase the participation of renewable energies in the energy mix for the next decade. This point makes it a key element in the new and future EU energy policy.

Likewise, the marked reduction in costs of these installations in recent years has managed to reach their profitability threshold, so that production costs are already competitive with prices of purchasing electricity from the grid. This has led to the introduction of the concept of "Grid parity".

These reasons are enough to justify that all **public administrations should promote in a decided and unanimous manner** the development of this technology, each in its respective field of activity, since its potential contribution to the achievement of the European objectives set for 2020 is unquestionable.

The web platform for information and dissemination named as "**Self-consumption in detail**" is created under these premises.

Self-consumption, as an alternative operation mode of electricity production, combines the advantages of distributed generation systems with the benefits related to environmental, social



and employment generation aspects, as it is generally based on the use of renewable energy sources.

Moreover, from the economic point of view, the production of electricity for own consumption entails lower electricity bills for users, in the residential and public areas as well as in the SMEs.

Thus the emerging self-consumption model opens up to companies **new opportunities to the restraint of energy costs** and, therefore, to improve their competitiveness.

Furthermore, these facilities make energy losses in the transmission and distribution networks lower and contribute to reduce peaks in demand. The result of this are noticeable savings in investments for future developments of the grid.

In the year 2015 came into force in Spain the Royal Decree 900/2015, which includes and provides legal cover for the type of electricity generation in self-consumption regime.

This new regulatory framework is not ideal and would be open to several improvements in certain technical, administrative and economic aspects. However, it constitutes a starting point that enables the right implementation of these facilities with a minimally acceptable profitability parameters for certain typologies of users and consumers.

EnerAgen, in addition to proposing improvements in future regulations to increase the introduction of this technology in the electricity market, considers that self-consumption should already be **promoted and enhanced as an option of the present**.

In this way the association aims to achieve the incorporation and generalization of this technology in all economic sectors, and to convey a **positive and optimistic message** regarding its evolution.

Finally, from EnerAgen, we also want to claim the important role of self-consumption as the driving force for the renewable energies business sector, which was really affected by the remuneration changes that took place a few years ago, and which in practice implied an almost total stop in their activity.

Using the self-consumption alternatives, the dynamism of these companies can be resumed, which have a high degree of technological innovation and a marked, yet proven, **capacity for generating employment and its future maintenance**.

For all the above reasons, self-consumption as an indigenous resource and a distributed and democratic system of energy generation, is undoubtedly the most immediate alternative for consumers to **regain confidence in renewable energies**.



OUR PROPOSALS

In relation to self-consumption, the Association of Spanish Agencies for Energy Management considers that:

- Self-consumption is a technically viable alternative for electricity production for an user own consumption, who can obtain savings in his energy bill.
- Self-consumption facilities have undoubted energy advantages as they constitute a distributed generation system that reduces losses in the electricity network.
- Relating to environment, self-consumption means a reduction in emissions compared with electricity production from conventional sources, since it is generally based on the use of renewable energy sources.
- Since 2015 the Spanish regulatory framework includes this type of electricity self-generation and sets up the economic schemes, some technical requirements and administrative conditions that these installations must be met for their connection to electricity grid.
- From EnerAgen it is considered that self-consumption should be promoted and strengthened to achieve its generalization across all economic sectors in a uniform manner.

For all these reasons, this association proposes the following **improvements on the current regulatory framework**:

- Obtaining simpler procedures for the connection of facilities and establishing uniform criteria and schemes at a national level, applied by distribution companies, would constitute a considerable advance for the introduction of self-consumption.
- Establishing a standard that allows the possibility of realizing self-consumption facilities in a "multi-user" typology would favour its extension to get impact in certain types or profiles of consumers.
- To carry out a review of charges for self-consumed energy. In order to set up these energy charges, an adequate contribution of self-consumption facilities in the actual costs scheme of the electricity system should be previously established. In addition, these charges should not have any deterrent effect or lead to facilities that would not be economically feasible.
- The appropriate regulation of self-consumption should consider specific characteristics of each technology and integrate some variables related to saving, efficiency and energy management that are definitely associated with these facilities.
- Once the advantages of self-consumption have been demonstrated, these facilities should evolve towards models with a more efficient operation, such as those based on energy balance compensation schemes or "net balance" systems.



ⁱ CONSIDERATION OF SELF-CONSUMPTION FACILITIES IN THE EU "WINTER PACKAGE".

What is the role of smart technologies in the transition to clean energy?

Consumers have been the first to take up electricity self-generation and they are the driving force behind this transition in energy model towards a cleaner and less centralised supply.

New technologies such as smart grids, smart homes, decreasing investment costs of rooftop photovoltaic self-generation systems and new alternatives in battery storage systems make it possible for energy consumers to become active agents in the electricity market.

The new Directive will allow users to consume self-produced electricity from renewable sources without facing undue restrictions and will ensure that they are paid well enough for the energy they sell to the grid.

What are the benefits to consumers?

Between 2009 and 2015 solar and wind technology prices have decreased by 80% and 30-40% respectively. This cost reduction allows consumers to produce more and more their own renewable energy.

Under the new Directive consumers will benefit from a greater number of rights to:

- Produce their own electricity and feed any energy surplus into the grid.
- Organize themselves in communities to generate, consume, store and sell renewable energy.
- Stop buying energy if they can achieve better energy performance by electricity self-production.

