Introducing Collective self-consumption in France

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www.pv-financing.eu
BRIEF REMINDER OF THE FRENCH PV LANDSCAPE
Overview of PV deployment

French electricity is cheap for consumers: 14-15 €cts/kWh for individuals, 8-13€cts for the commercial segment;

PV electricity production represented 1.6% of the total French electricity consumption in 2015

Source: SOeS, 2nd quarter 2016 & Multi annual energy programs

Source: Observatoire de l’énergie solaire photovoltaïque en France, September 2016
Evolution of PV business models

Feed-In Tariffs & tenders

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For households, a special FiT was introduced to promote roof integrated PV. In 2015-2016, the following changes were made:

- Market based remuneration;
- 1 year of collaboration with professionals;
- Concerns PV installations above 500 kWc;
- Rise of aggregators;
- Implementation of a last recourse buyer;
- Increase the financial risk for investors and banks.

Tenders are still the rule for a feed-in premium mechanism.

ENERGY TRANSITION LAW

Implementation of a feed-in premium

2015-2016

- Project finance
- DSCR: 115%
- Debt: 80% / Equity: 20%
- Tail: 18 years

2016...

...
(COLLECTIVE) SELF-CONSUMPTION
An attractive business model

- Among citizens

Would you consider investing in a PV installation with self consumption?

- NO 53%
- YES 47%

When?

- More than 5 years 10%
- Between 2 & 5 years 26%
- Less than 2 years 64%

- Among commercial centers

Would you consider investing in a PV installation with self consumption?

- NO 38%
- YES 62%

Why?

- For autonomy 68%
- To control energy expenses 68%
- For environment 42%
- For an added-value to the building 37%
- To avoid a rise of electricity prices 37%
- To reload electric cars 5%

- Although PV has a bad image, people are keen to self-consumption
- Commercial centres is the segment where self-consumption makes sense:
  - Electricity = 40% of their budget
  - They anticipate a 5% rise in their electricity price
- Self-consumption also raises interest in social housing.

Source: Enerplan colloquium, 25 May 2016
« Self-consumption is the situation when a producer, named self-producer, consumes himself all or a part of the electricity produced by his installation. » (Art. L 315-1, Energy Code).

- The tariff for using public grid (Turpe) has to be defined for self-producers.
- DSOs have to implement “acceptable conditions for the implementation of self-consumption operations”.
- Tender for 40 MW of PV published in August 2016: 100 – 500 kW, at least 50% of SC.
Collective self-consumption

« Self-consumption is collective when the electricity exchange is made between one or more electricity producers and one or more final consumers, linked together by a legal entity, and from which the injection and exit points are on the same low-voltage loop of the public distribution grid. » (Art. L 315-2, Energy Code).

- Producers and consumers **HAVE TO** be part of a same legal entity.
- The choice of the type of entity is free (company, cooperative, association...)
- The entity in charge of the whole operation:
  - It manages the relationship between consumers and producers
  - It informs the grid operator about the breakdown of consumed electricity among consumers
It is called self-consumption, but it is a direct selling scheme.
The risk is the default of the customer and the question is the transmission of the contract.
BARRIERS: WHAT IS IMPORTANT?
Is the producer an electricity supplier?

First draft of the text 🟢

« The producer SELLs the electricity »

Final version of the text 🟥

« The producer SUPPLIES the electricity »

Does the electricity producer needs the status of “electricity supplier”?
Is it the producer or the legal entity?

- An electricity supplier has major obligations:
  - It needs a ministerial approval
  - It has to present securities
  - It has a balancing responsibility
  - It has to inform the consumer about the origin of electricity.

The answers will determine whether collective self-consumption can be the next major evolution of French photovoltaic deployment
Excess electricity

New article L315-5, Energy Code: Excess electricity can be sold or fed into the grid for free. Nothing about its storage in a battery.

Two electricity providers can be added to the scheme:
- One for the injection of excess electricity;
- One for the consumer to cover excess electricity demand

- According to the new ordinance, if the producer wants to feed excess electricity into the grid, its installation should not exceed a certain capacity
- This maximal capacity will be set up by decree
- The model of collective self-consumption will therefore depends on the choice of this maximal capacity.... 3 kWc ? 10 kWc ? 35 kWc ?
Thank you for your attention

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