

Mise en œuvre de projets lauréats de l'appel d'offres pilote en autoconsommation pour bâtiments commerciaux en France

Gauthier DIENY, Responsable développement photovoltaïque, GreenYellow
gdieny@greenyellow.fr – (+33) 7 88 90 56 21

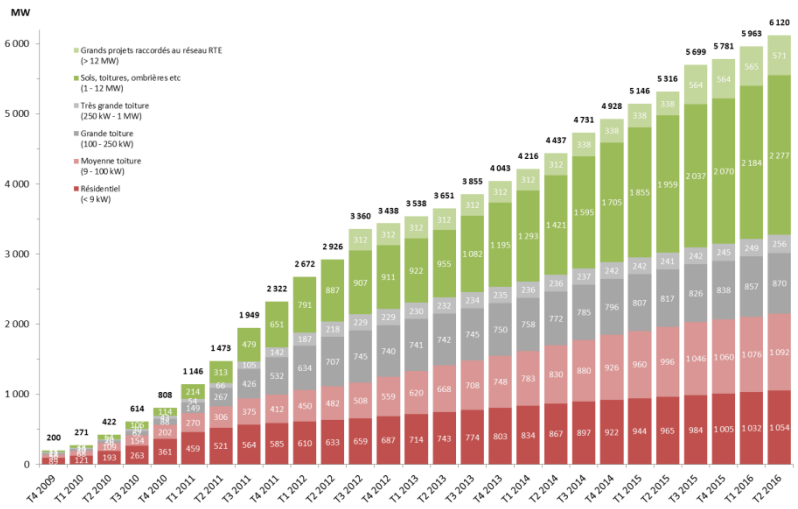
Nouveaux modèles d'autoconsommation photovoltaïque en France et en Allemagne : opportunités commerciales et impacts sur le réseau électrique



Photovoltaic : the situation in France

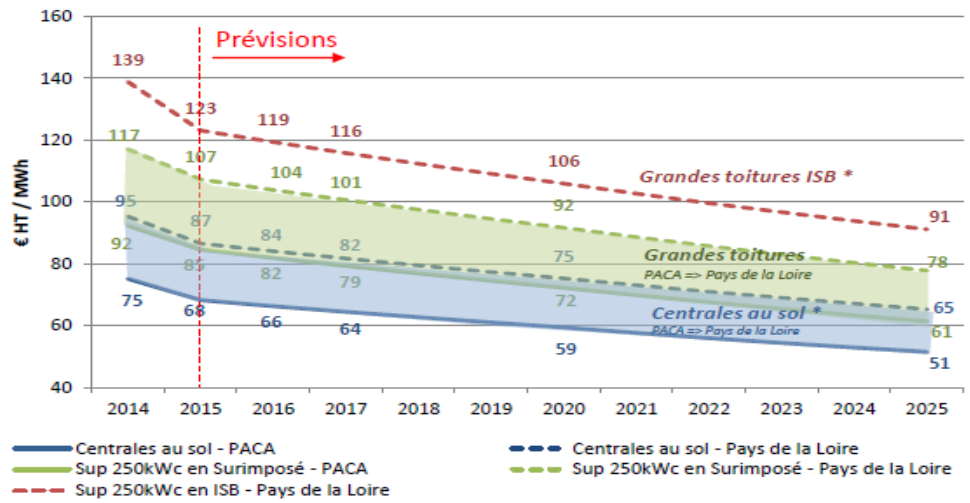
Until 2016, no significant self consumption...

- No incentive (except regional subventions)
- No clear rules (taxes? Connection procedure?)



Source : France Territoire Solaire – Observatoire trimestriel – décembre 2016

The competitiveness of PV in France



Source : Icare & Consult – Etude des retombées de la filière solaire française – février 2017

Photovoltaic : the french incentives

	Self consumption tender	Grid tender	« Guichet ouvert »
Unit power	<i>Roof and car shelters < 500 kWc</i>	<i>Ground, roof and car shelters < 17 MWc</i>	<i>unlimited</i>
Total power awarded annually	<i>150 MWp</i>	<i>1 450 MWp</i>	<i>unlimited</i>
First round	<i>25/09/2017</i>	<i>10/03/2017</i>	<i>-</i>
Frequency	<i>4 months</i>	<i>4-6 months</i>	<i>-</i>
Incentive	<i>During 10 years, a premium per MWh produced in addition to the price paid by the consumer</i>	<i>Similar to a 20 year PPA</i>	<i>Subvention of a part of the CAPEX (depending on the power - 0,1€/Wc for 99 kWp)</i>
Value of the production	<i>Price paid by the consumer + above premium (around 20 €/MWh)</i>	<i>Between 60€/MWh (ground) and 105€/MWh</i>	<i>Price paid by the consumer</i>
Maximal time for work completion	<i>30 months</i>	<i>24 months</i>	<i>18 months</i>

The first french self-consumption tender

Self consumption tender

Launched in August 2016/1st round :
30th September

72 projects awarded – 20,6 MWp

Medium premium P : 40,88 €/MWh

22 projects including crowdfunding
(+5€/MWh bonus)

Roof or carshelter < 500 kWc

Self consumption mini level : 50%

Carbon footprint max level : 500
kgCO₂/kWc

Penalties if injection to the grid

"Collective self consumption"

Key Points

Basic rules

How is the global premium calculate?

$$\text{Complément de rémunération} = (P+10) * E_{\text{Autoconsommation}} + P * E_{\text{injection}} - C * E_{\text{produite}} * (P_{\text{max injectée}} / P_{\text{dist}})$$

Global premium

Self consumption premium

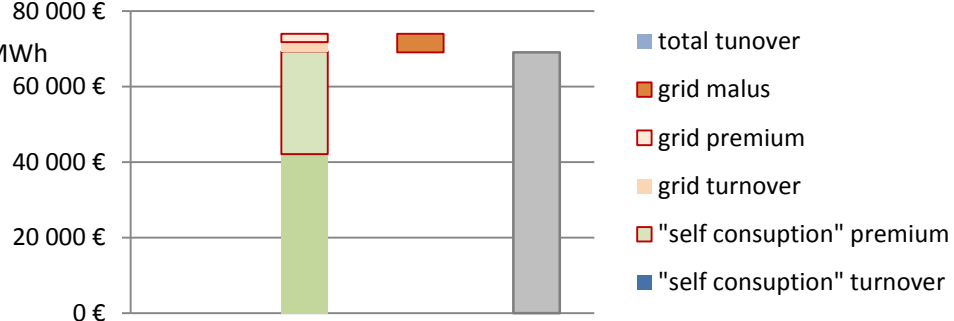
Grid premium

Grid malus

- A selfconsumed kWh worth more than a grid kWh
- High penalties based on power if grid injection
- No incentive for storage

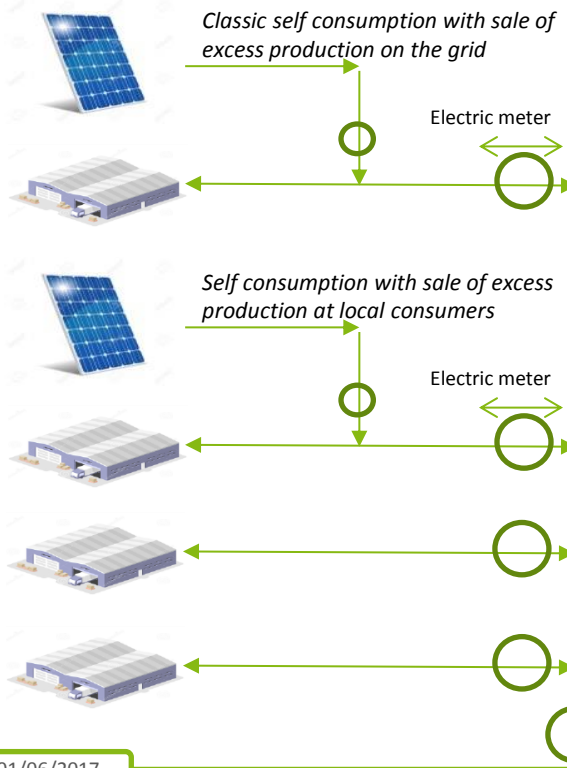
Case study

- 500 kWc – 1 100 kWh/kWc
- 90% self-cons. 80 000 €
- Elec price : 85€/MWh

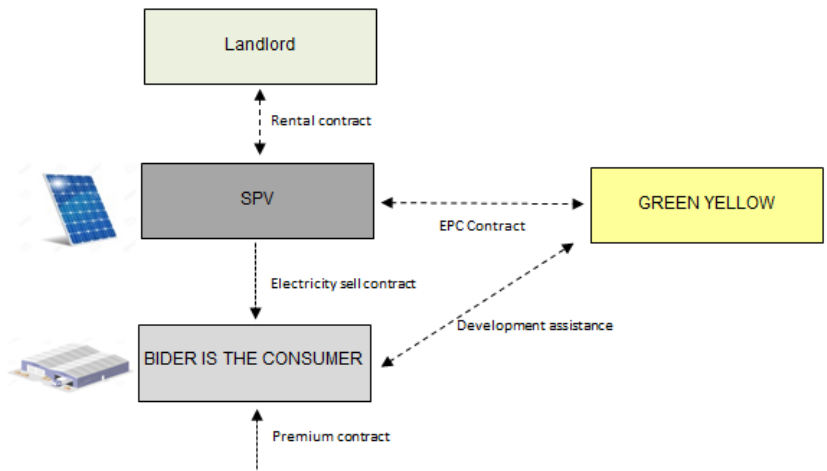


The first french self-consumption tender

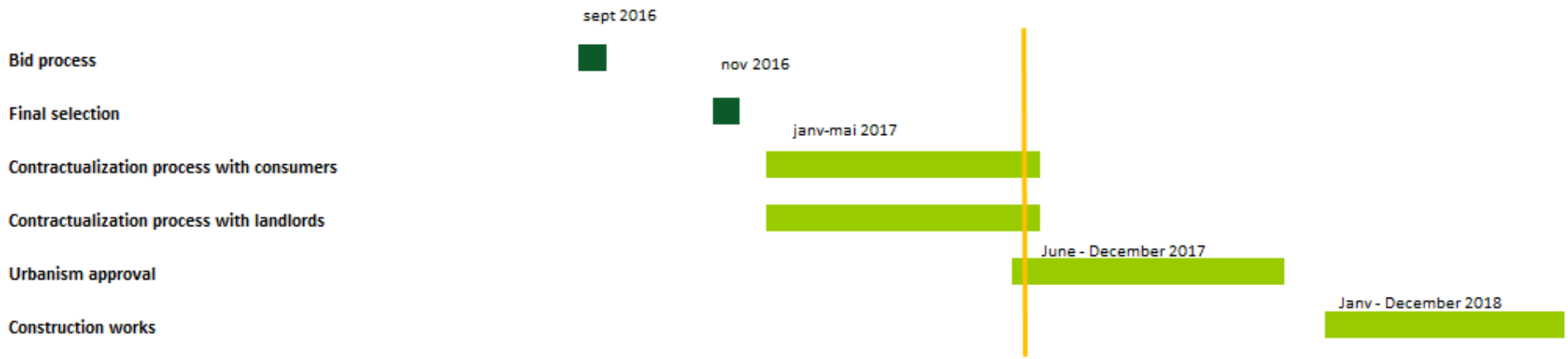
What kind of self consumption ?



Scheme of a project



Schedule



THANK YOU FOR YOUR ATTENTION

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