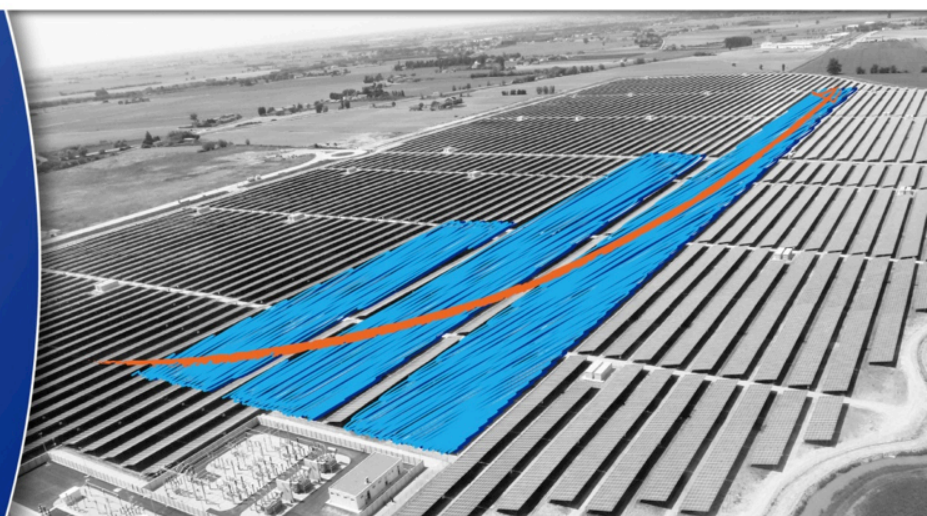




Collective self-consumption

Julien COURTEL



2nd of May, 2017



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 646554

Less than one year of history



July 2016: An ordinance sets the framework for self-consumption, including collective SC

- One or more Producer
- One or more consumer
- In the same legal entity

February 2017: Self-consumption and collective SC are finally defined by a law

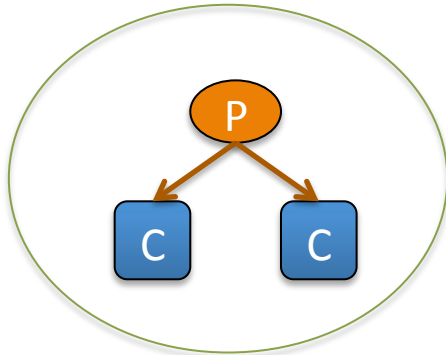
- Demand and injection points are situated after a low voltage substation

End of April 2017: A draft decree gives the last details regarding collective self-consumption schemes

- Relationships among stakeholders
- Storage

...

Collective self-consumption at a glance



Consumers and producers have to be part of a same legal entity.

- The form of this entity has to be decided on a case by case basis
- Association, company, cooperative....

The PV installation operated by one producer can not exceed 100 kW.

 Consumer

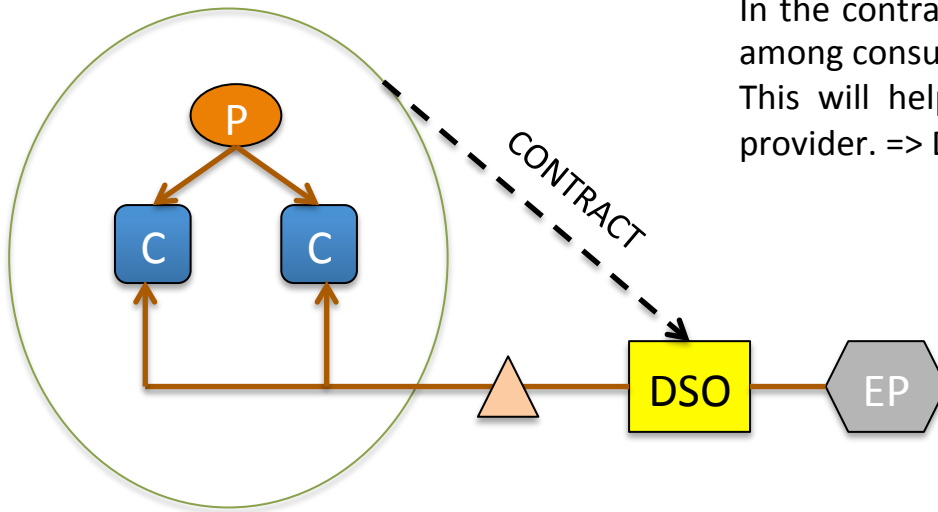
 Producers

 Legal entity

 Electricity flow

The other stakeholders


In the contract, the legal entity sets the repartition methodology among consumers.
This will help to allocate electricity supplied by the electricity provider. => Determine the electricity bill.



 Consumer

 Producers

 Legal entity

 Distribution Service Operator

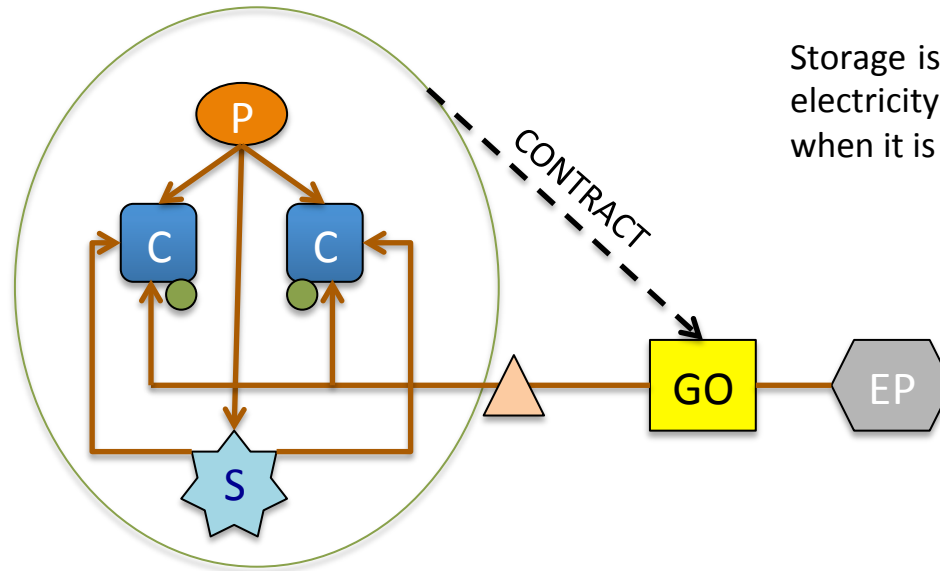
 Electricity provider

 Electricity flow

 Low voltage substation

The low voltage substation blocks many projects. It is not a barrier on the short-term, but may become one in 1 or 2 years.

Smart-meters and storage









Storage is considered as a consumer when electricity is stored and as a producer when it is supplied.




The grid operator has the obligation to install smart-meters

Production for consumers + stored electricity \leq total production
 Production for consumers \leq total production + from storage electricity

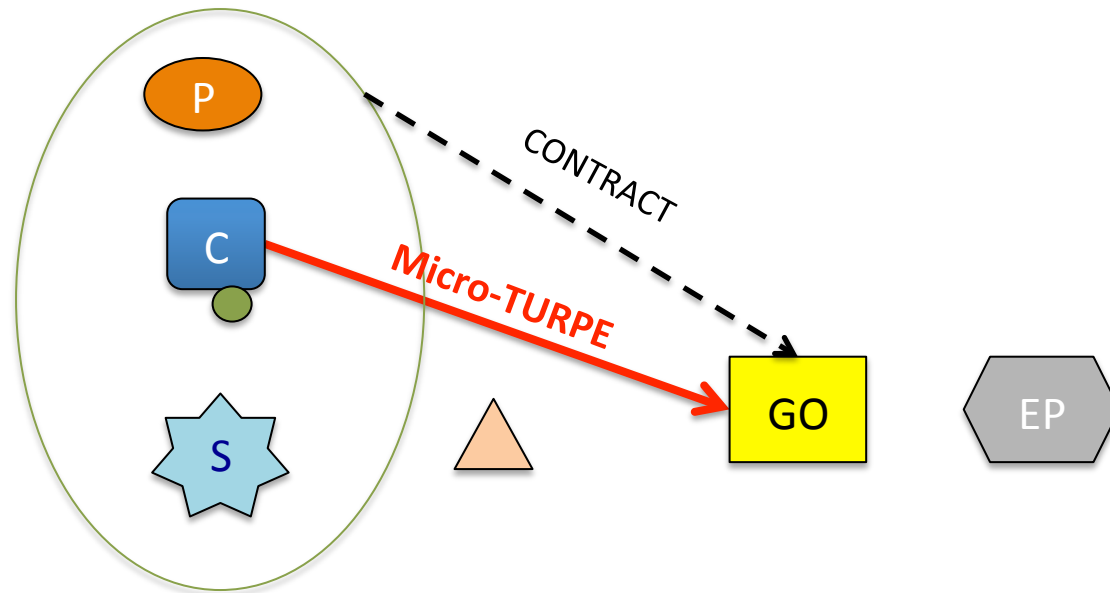
} For a time slots defined by the grid operator (30 ' now)

 Consumer
 Producers
 Legal entity

 Grid operator
 Electricity provider
 Electricity flow

 Low voltage substation
 Smart-meters
 Storage

Four inputs missing to have the complete overview of collective self-consumption



The TURPE is the price that paid by consumers for the services of the grid operator

- A “micro-TURPE” will be published adapted to self-consumption projects.
- The financial viability of collective self-consumption projects will depend on this micro-TURPE.
- This micro-TURPE amount will be the key for the quantity of collective self-consumption projects that will be achieved

The technical documentation that describes the connection to the grid (deadlines, information needed...).

A contract template between the legal entity and the grid operator is needed.

The limitation of the scope to the same low voltage station will become a barrier in the medium-term.

Thank you for your attention