

Prosumption in Belgium

Brussels, 29th of May 2019



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Prosumption in Belgium

Content

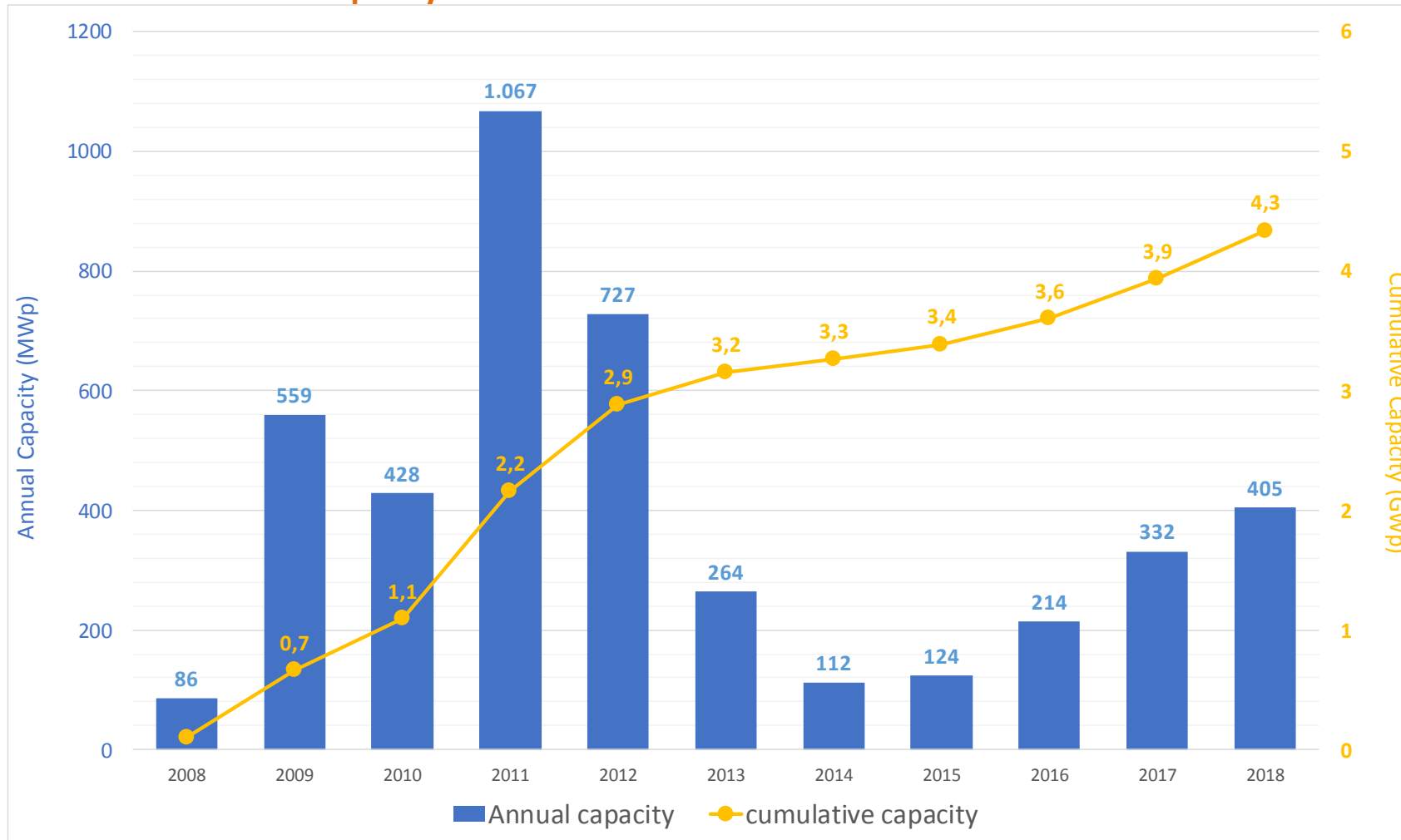


1. Market status
2. Market Perspectives
3. PV collective self-consumption in Flanders
4. PV collective self-consumption in Wallonia
5. PV collective self-consumption in Brussels

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1. Market status

Cumulative installed capacity

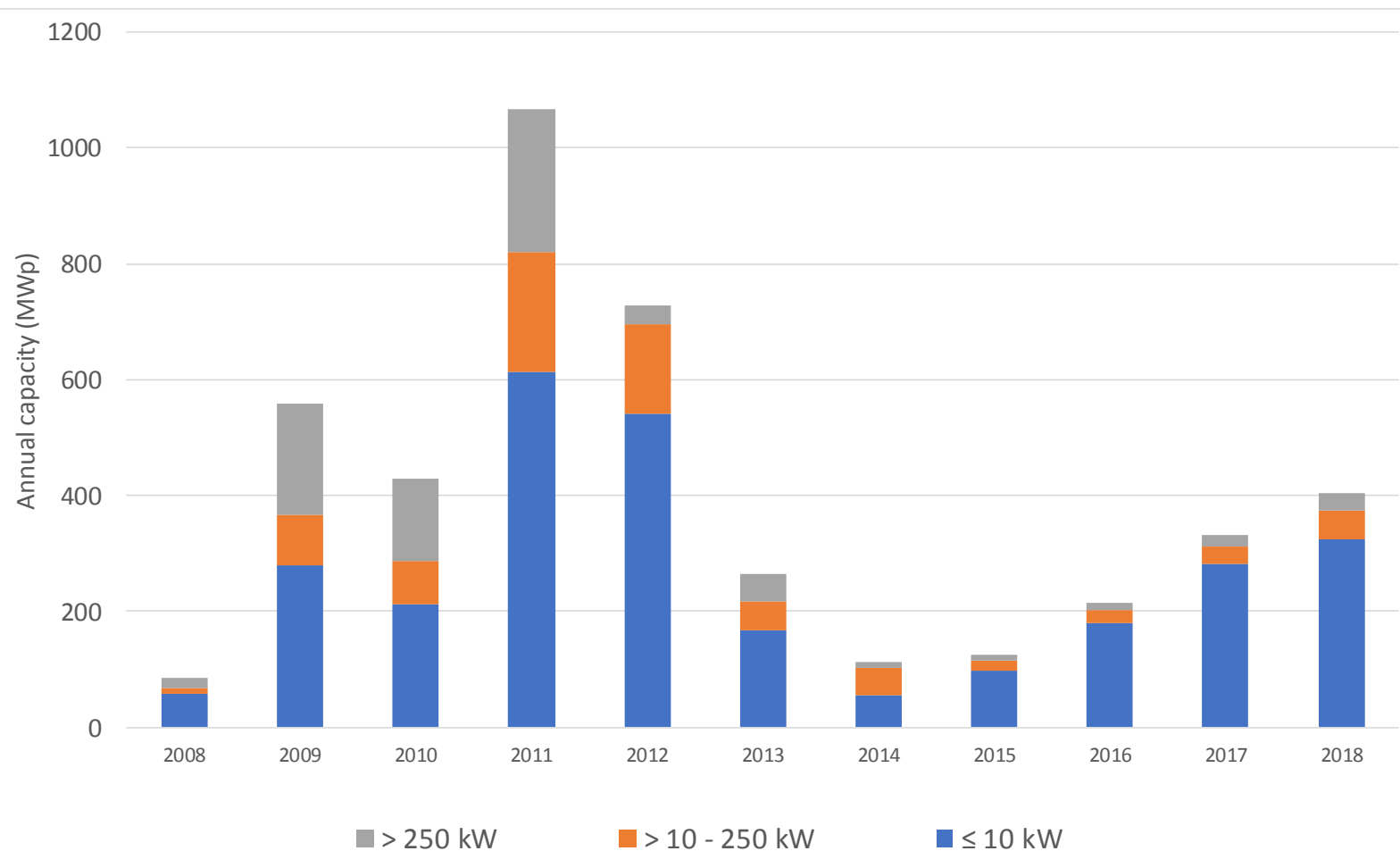


- Boom 2009-2012
 - Fast declining system prices
 - Too generous subsidies
- Market Crash in 2013
Followed by 5 years of growth
- More than 4 GW installed
- 383 Wp/capita

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1. Market status

Amount of annually installed PV systems per market segment



residential

> 500.000 residential systems
> 10 % of the households
64% of the installed capacity



commercial

> 7.500 commercial systems
18 % of the installed capacity



industrial

> 1.000 industrial systems
18 % of the installed capacity

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1. Market status

Rebirth of the industrial sector



99 MW Kristal Solar Park in Lommel, Engie
Biggest plant of Benelux

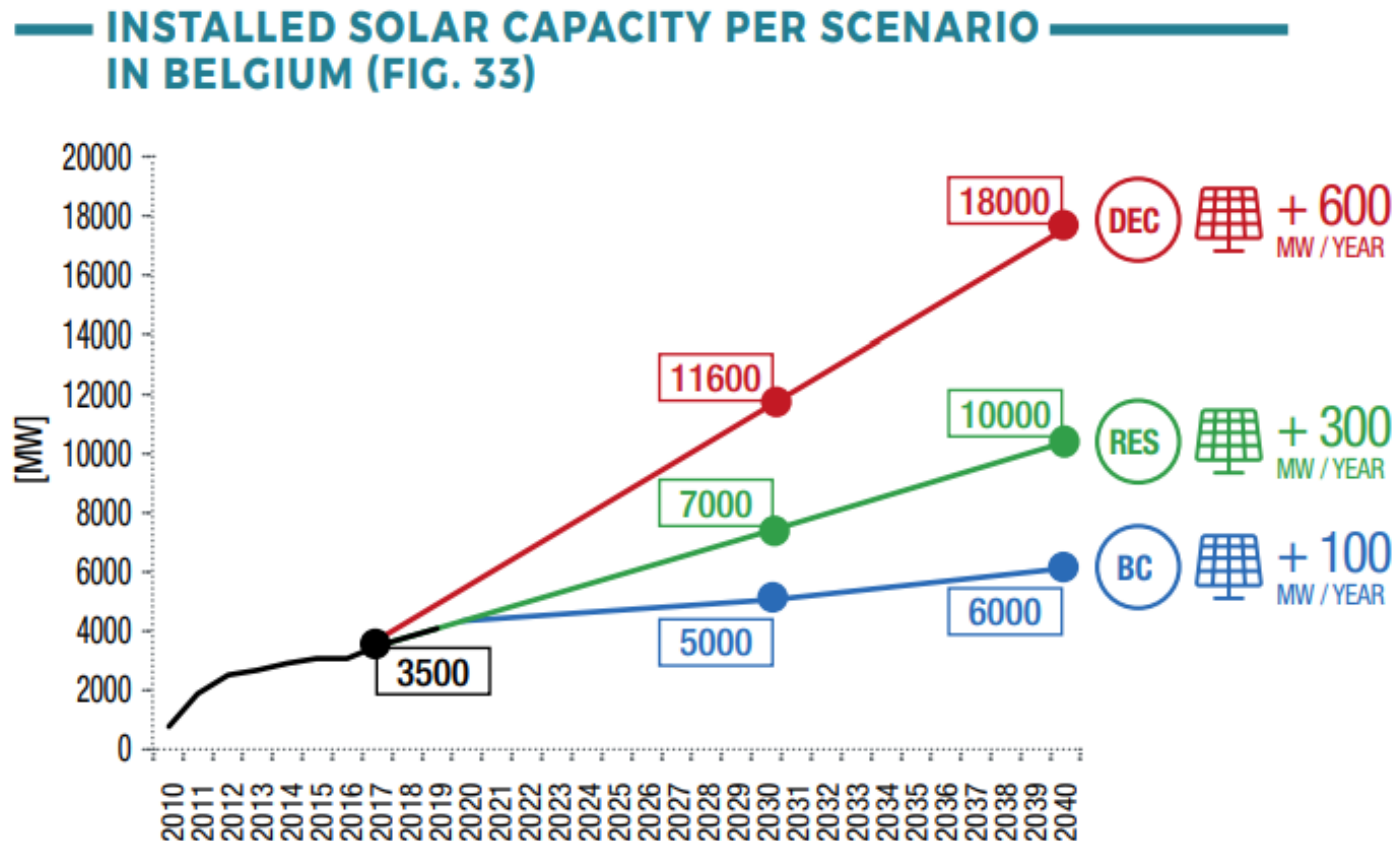


1 MW floating plant Hesbaye Frost, Perpetum

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2. Market Perspectives

Elia (TSO) projections

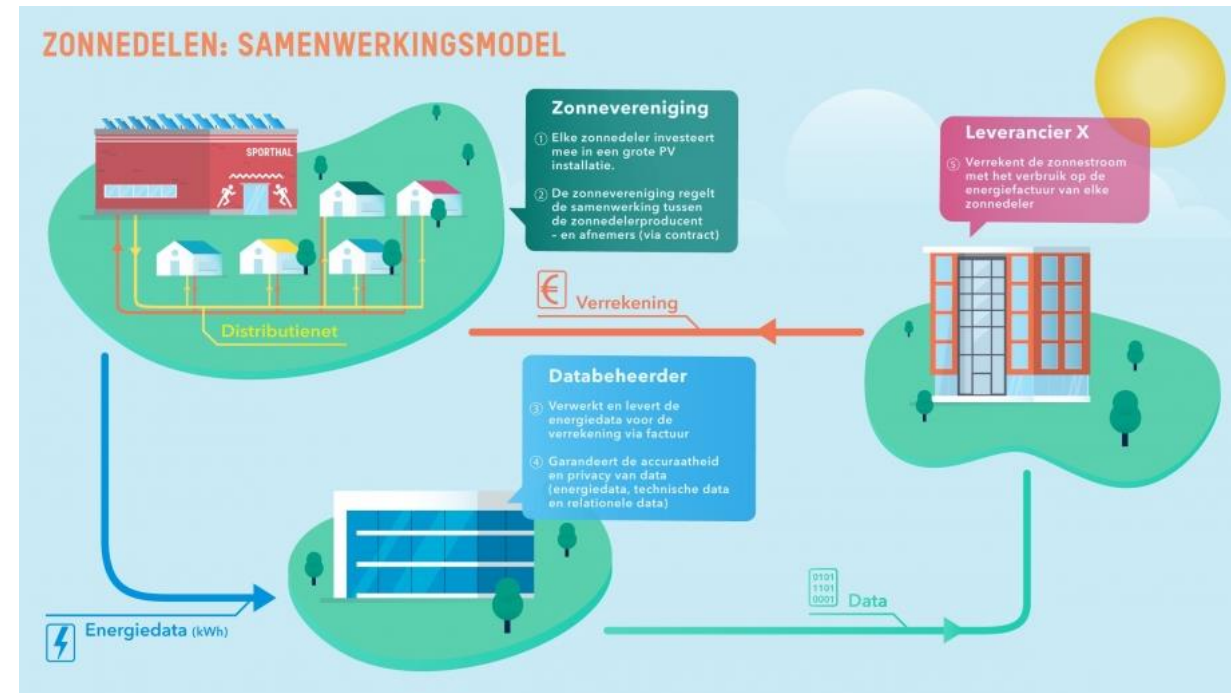


- 650 MWp / year for the most ambitious scenario from the TSO
- Compilation of regional targets for 2030 : ± 600 MWp/year also
- From 4 GWp to 12,8 GWp in 2030
- Estimated roof potential in Flanders + Brussels : ± 60 GWp

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3. Collective self-consumption in Flanders

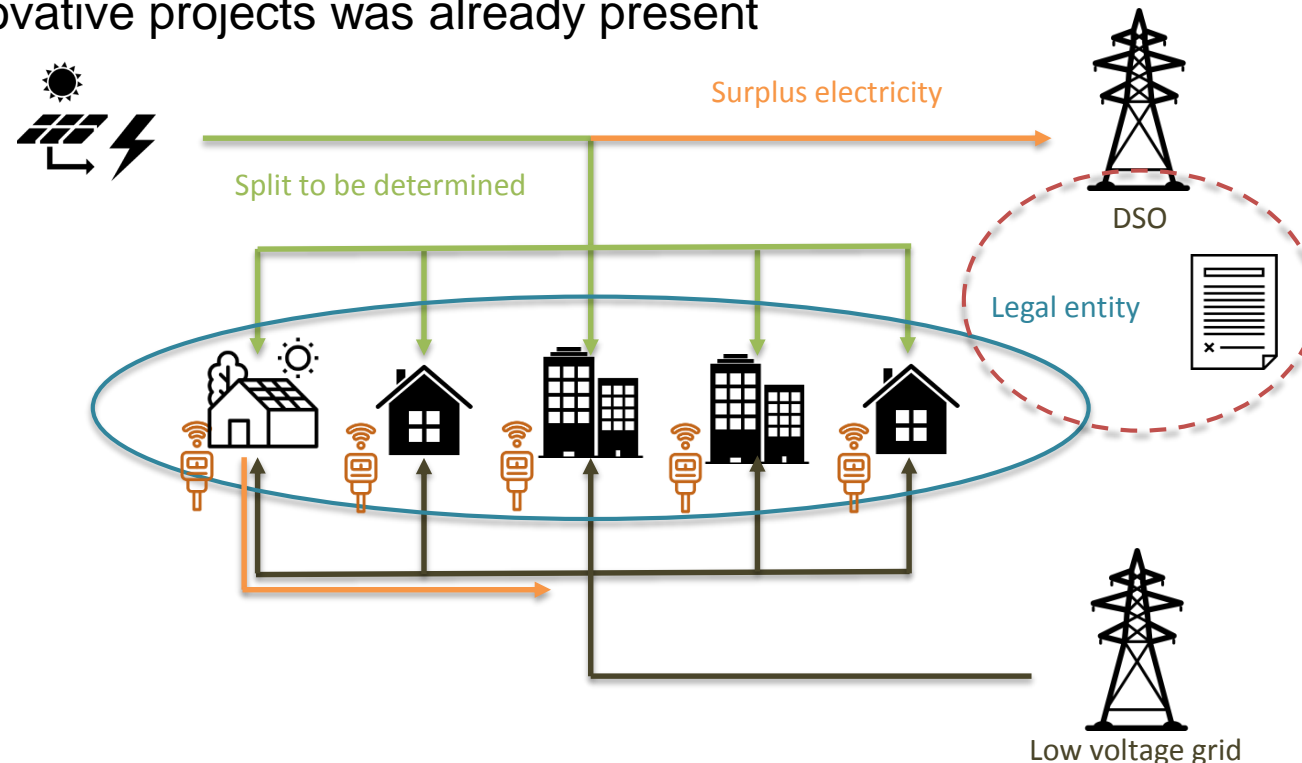
- **No legal framework yet**
 - Will be one of the challenges for the new energy minister
- **Test Project Zonnedelen**
 - PV system smaller than 250 kVA
 - People can buy shares and have a proportional reduction of the electricity bill linked to the production
 - Time step, perimeter, cost of the energy?...
 - With DSO Fluvius
 - No positive feed-back yet
- **PV Vlaanderen organizes working group to come with concrete legal propositions**
<http://pvvlaanderen.be/>



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4. Collective self-consumption in Wallonia

- **Legal framework almost complete**
 - Decree around energy communities (14/03/19) fixes legal framework for collective self-consumption
 - Next government will fix the implementation decree
 - Framework for innovative projects was already present



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4. Collective self-consumption in Wallonia

- **Legal entity could regroup**

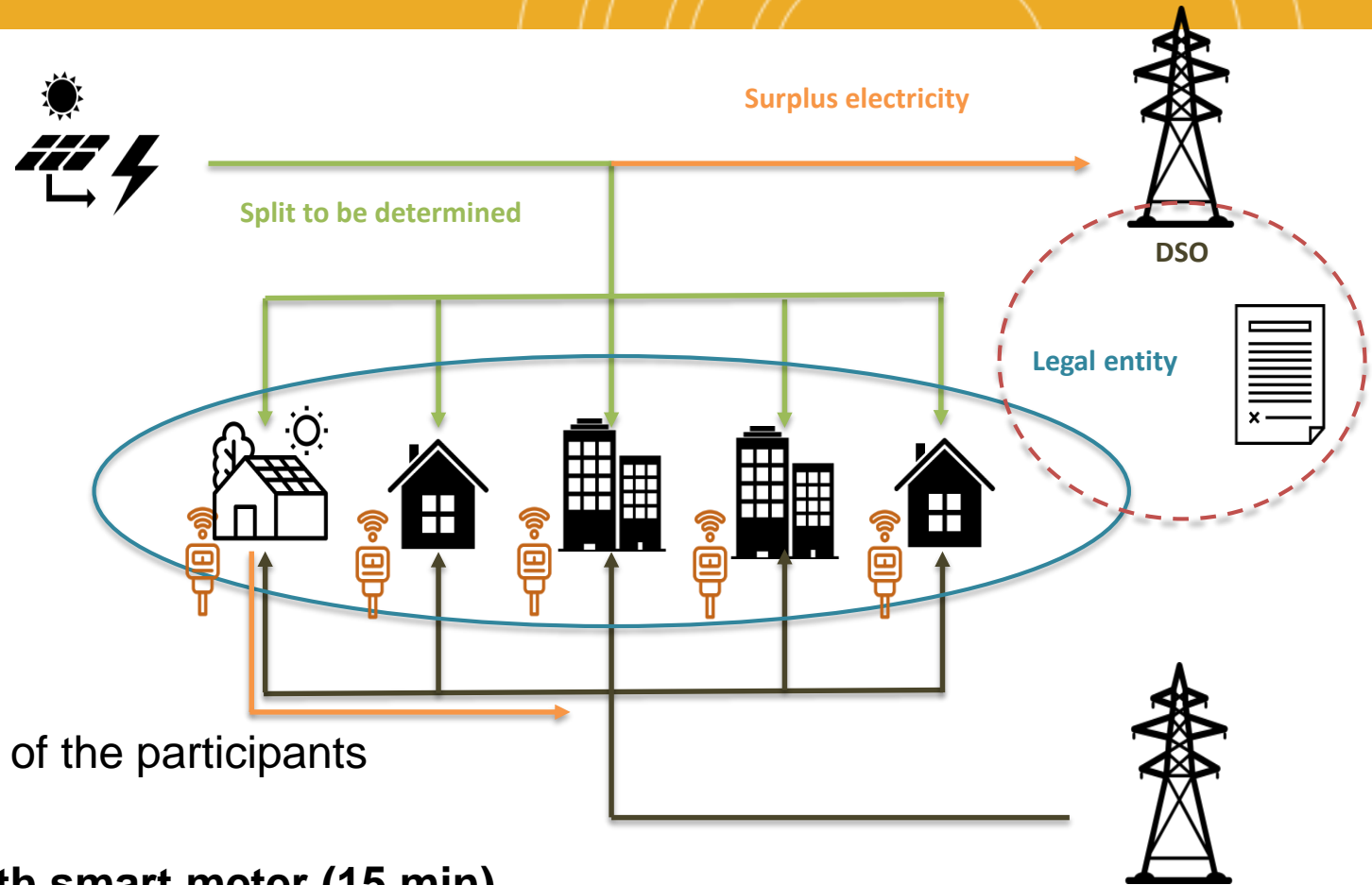
- Prosumer
- Consumer
- Multi-apartment buildings
- SME / Industry
- Local authorities

- **Legal entity will take care of**

- Split key
- Selling surplus electricity
- Buying extra electricity in the name of the participants

- **All participants will be equipped with smart meter (15 min)**

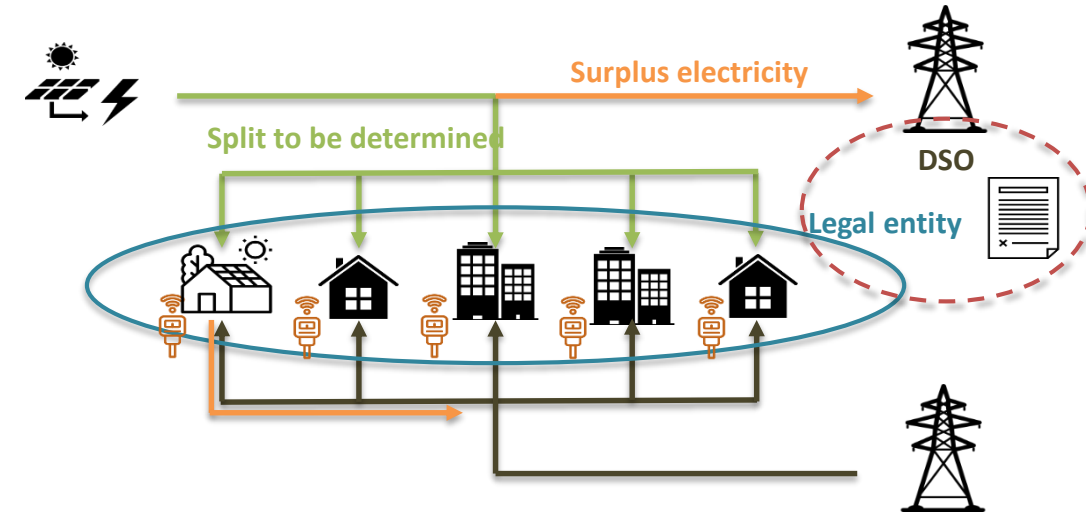
- **DSO is in charge of metering**



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4. Collective self-consumption in Wallonia

- **implementation decree needs to define**
 - Geographic area (LV? Distance?)
 - Tariff for self-consumed electricity



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4. Collective self-consumption in Wallonia



Merygrid – smart micro-grid

How to increase self-consumption in a smart micro-grid

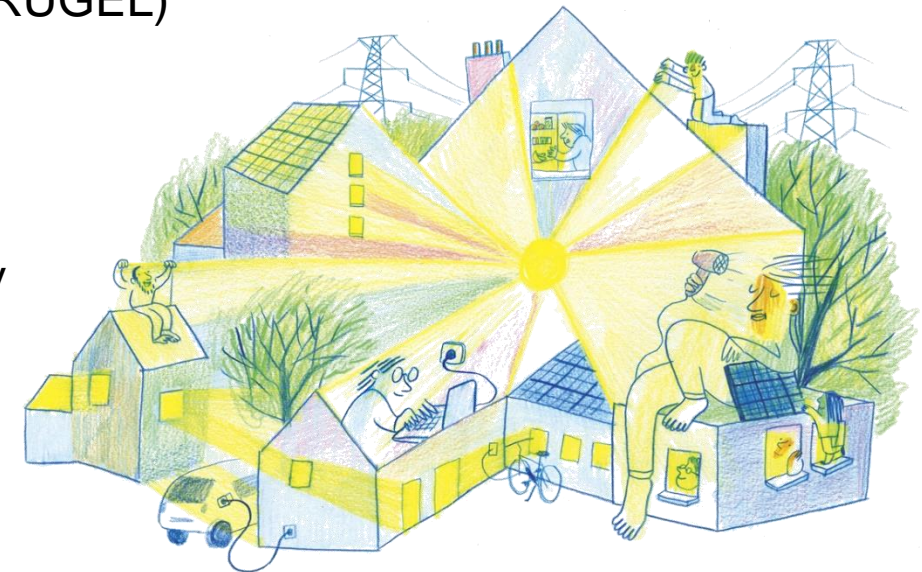
- **Consumption : 3 companies**
- **Solar (60 kWp) – Hydro turbine – Batteries (300 kWh)**
- **1 connection point to the grid**
- **Minimize electricity from the grid.**



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5. Collective self-consumption in Brussels

- **Partial legal framework**
 - End of annual net-metering for all prosumers begin 2020
 - Framework for innovative projects developed by regulator (BRUGEL)
- **Innovative Project “Voisin d’énergie”**
 - ULB, APERe in collaboration with DSO Sibelga
 - Finding innovative solutions to organize and distribute energy through cooperation between neighbors.
 - Participative approach



<http://www.voisinsenergie.brussels/>



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Thank you for your attention



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www.pvp4grid.eu



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