Producing your own solar energy on someone else's roof:

Lessons learned for Dutch policy makers

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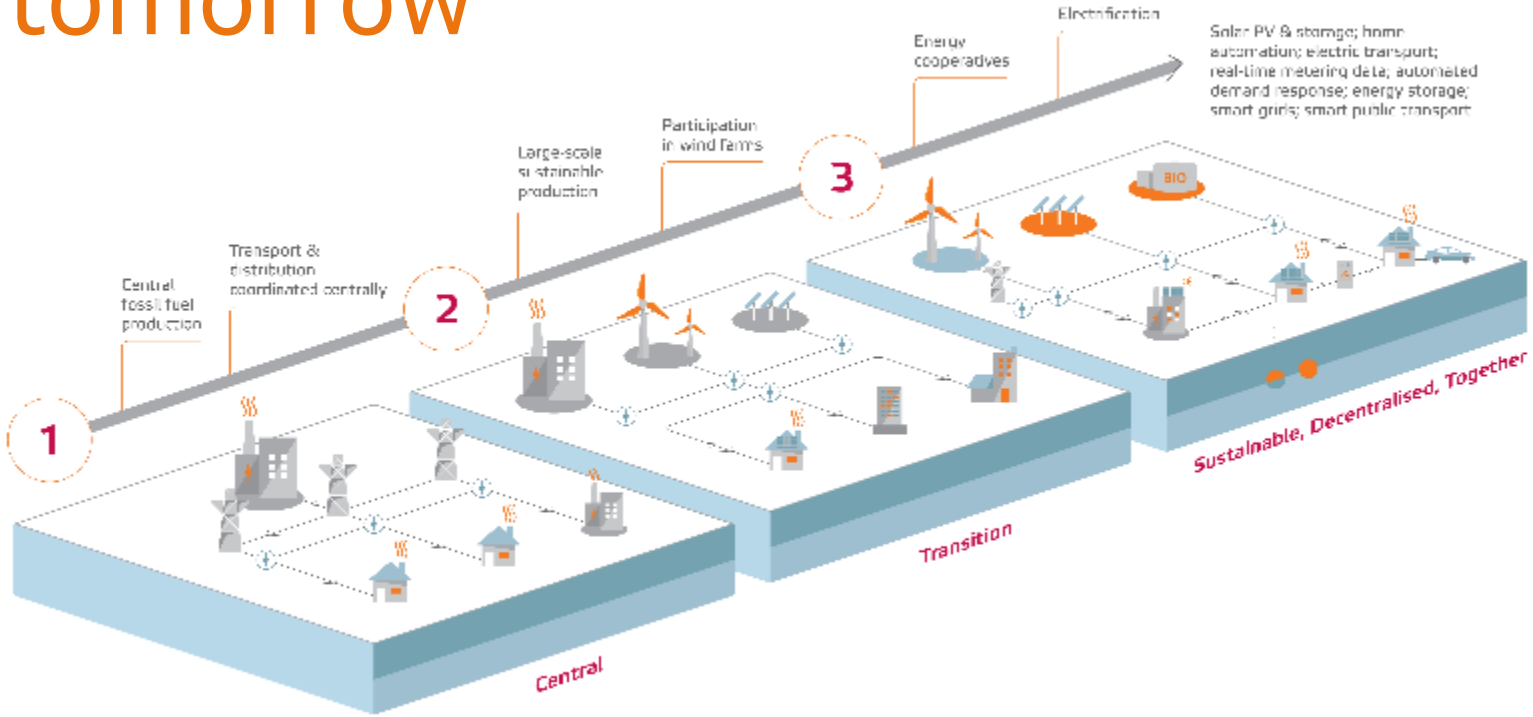
Eneco Group


Eneco Groep
Everyone’s sustainable energy

The energy system of tomorrow



Exponential price decline boosts solar

1.2 GW solar farm Abu Dhabi at **USD 1.79 cents/kWh** (april-19)

Bloomberg, 5 November 2017

So, solar panels are financially attractive


But only 11% of Belgian households has solar panels on their roof….
How come?

“Because solar panels can’t fit on my roof"

“Because I don’t own my roof"

“Because it’s a lot of fuss with all that stuff in my home"

“… and a BIG fuss ON my roof!"


So, how do we get 5 million Belgian households on solar??

Your solar panels on someone else's roof

Eneco ZonneHub™

Producing solar power on someone else’s roof

- Solar power from your own panels, on a rooftop nearby

- Eneco takes care of location, installation and service & maintenance

- Solar production is credited on energy bill

Roof owners as local heroes

Leading by example

There is enough place for 145 million solar panels on unused roofs in the Netherlands

Many of them are owned by companies which are not going to invest by themselves

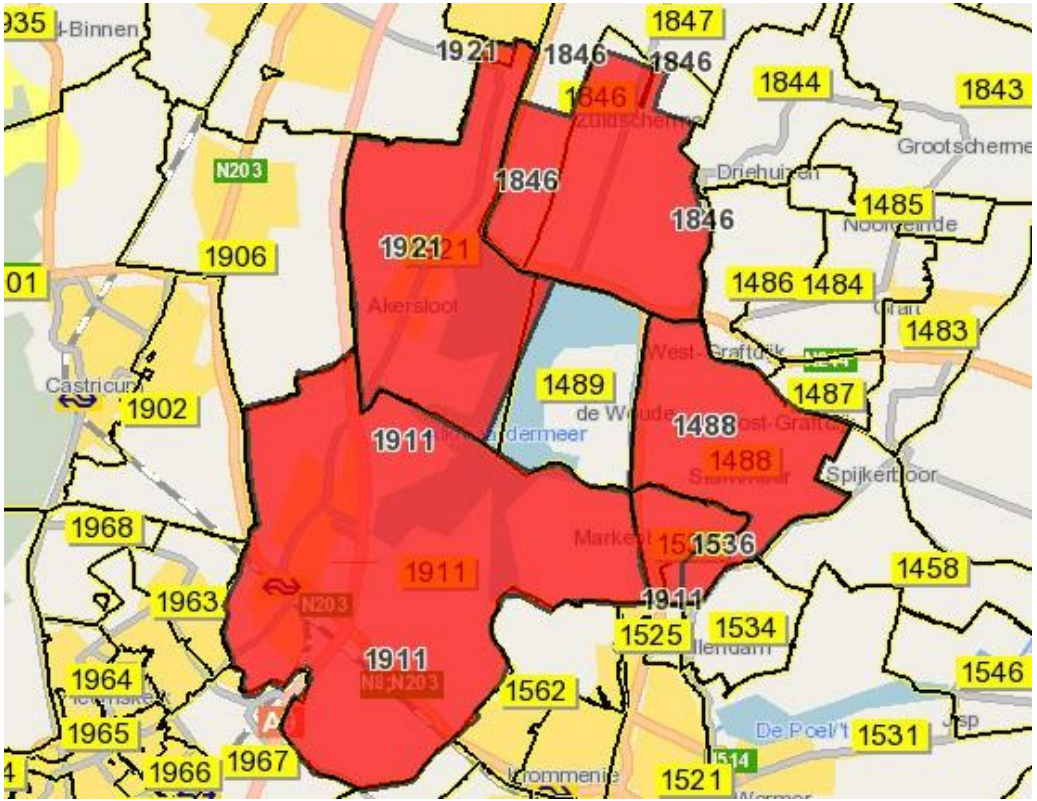
Some of these roof owners are happy to share make room for solar panels of their neighbouring clients, citizens or employees

Rabobank

coop supermarkten

gemeente Goeree-Overflakkee

“PostCodeRoos (PCR)- policy”



Goals

1. Stimulate growth of residential solar

2. Induce energy awareness and savings

How it works

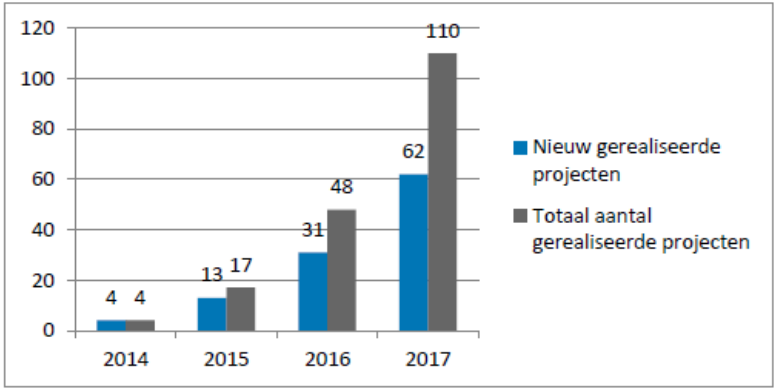
- Local households invest in a joint local community solar project (via a cooperation)

- All have to live within the adjacent 4-digit zip code area next to the solar project

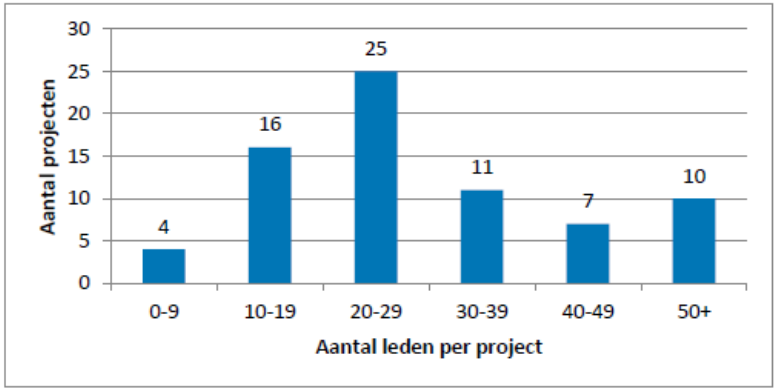
- Each kWh solar production gives 1 kWh energy tax exemption for 15 years via the energy bill of suppliers

Growing but still small (PCR) market

- PCR market doubles annually but still has to reach maturity. People are starting to get aware of it
- PCR legislation was implemented in 2014 but until an amendment in 2016, it was not financially attractive enough for households to invest into
- End of 2017 **110 PCR projects** were in production; annual doubling expected the next years
- Upon an average 75 kWp PCR solar project some **3k Dutch households** participated in solar panels on someone else's roof end of 2017
- In 2020 approx. **800 PCR solar assets** are expected facilitating approx. **28k Dutch households**



Figuur 2 - Het verloop in gerealiseerde projecten gedurende de looptijd van de postcoderoosregeling.



Figuur 3 - Verdeling van het aantal leden per postcoderoosproject (n=73).

KWINKgroep, Evaluatie PCR regeling, december 2017

Key market observations

Conclusions

1. Great "problem-solution fit": PCR aids the right target group and stimulated them to go solar. PCR clearly contributes to their increased awareness of energy savings and support to the local energy transition

2. The subsidy scheme is relatively expensive (compared to other renewable subsidies) but that was expected, as relative small cooperative/joint projects are accompanied with additional costs.

3. However, quantitative results are staying behind the goals formulated by the government.

Boundaries that currently limit PCR projects

1. Residential relocation condition (stay and live within the specific PCR zip code)

2. Notarial building rights are obligated (long-term roof top lease limits a building's sales attractiveness)

3. Limited #households in 4-digit PCR zip code area for large(r) solar projects

4. PCR solar panels don't account for a building's energy efficiency label (no incentive for roof top owner)

1.

Community solar adds to local energy production, creates awareness and targets the right audience

2.

Community solar is relatively expensive → don't compare it to the cheapest form of energy subsidy

3.

Learn from Dutch flaws in legislation: community solar is hard and time intensive to realize so make it as easy as possible for households and roof top owners

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