



# Energy exchange on industrial areas in the Netherlands

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## Energy exchange

### 1 Heat exchange

- heat law (only for small users)
- heat exchange between companies is free



### 2 Electricity exchange

- no regulations on DC
- electricity law for AC



## Heat exchange

- 1 No legal restrictions for industrial exchange
- 2 Attentions points:
  - supply security (bankruptcy, relocation of companies)
  - managing of the network

## Electricity exchange

### 1 DC exchange

- no limitations
- DC solar of wind energy exchange
- DC battery storage

## Electricity exchange

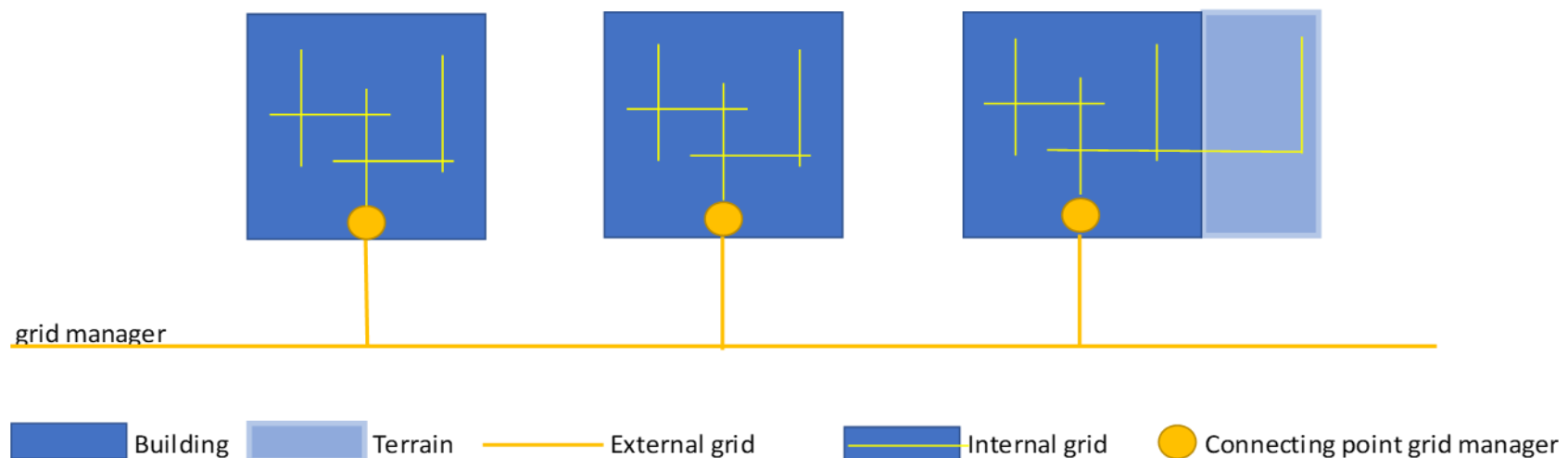
### 1 AC exchange

- electricity law
- exchange only via the grid

## Electricity exchange

### 1 One connection for each property (real estate)

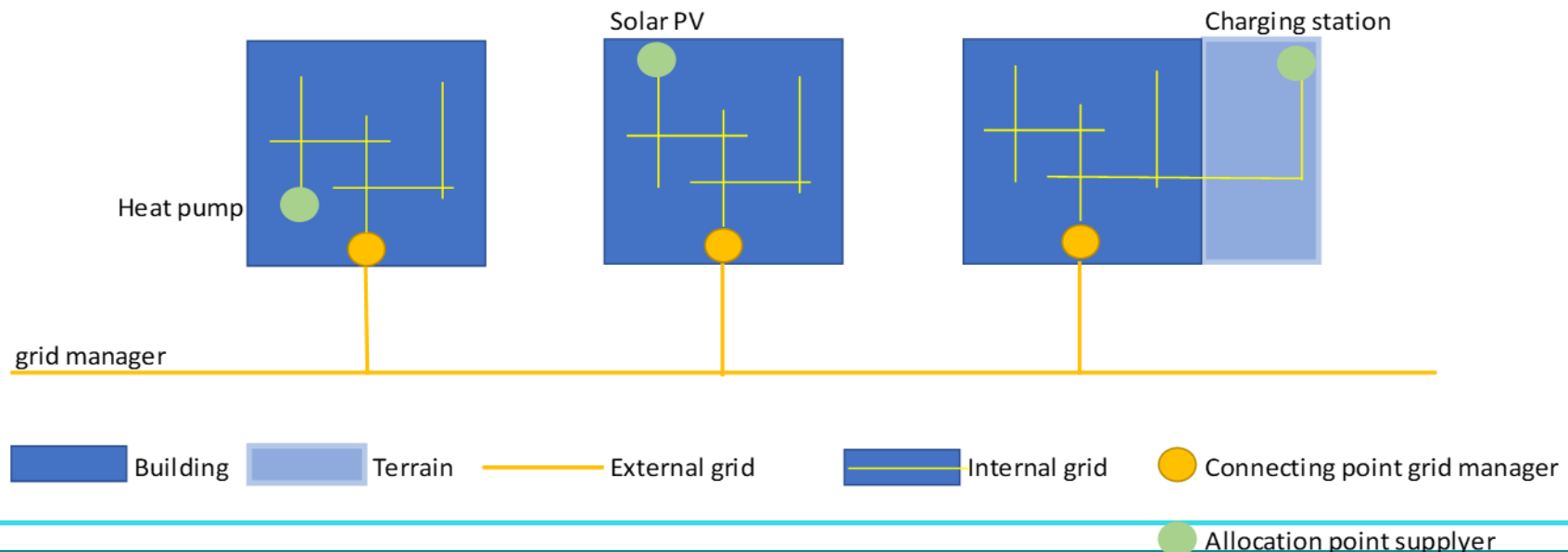
- building and surrounding terrain
- more properties (whole business park) on one connection is not possible
- only with experimental status



# Electricity exchange

## 1 New legislation

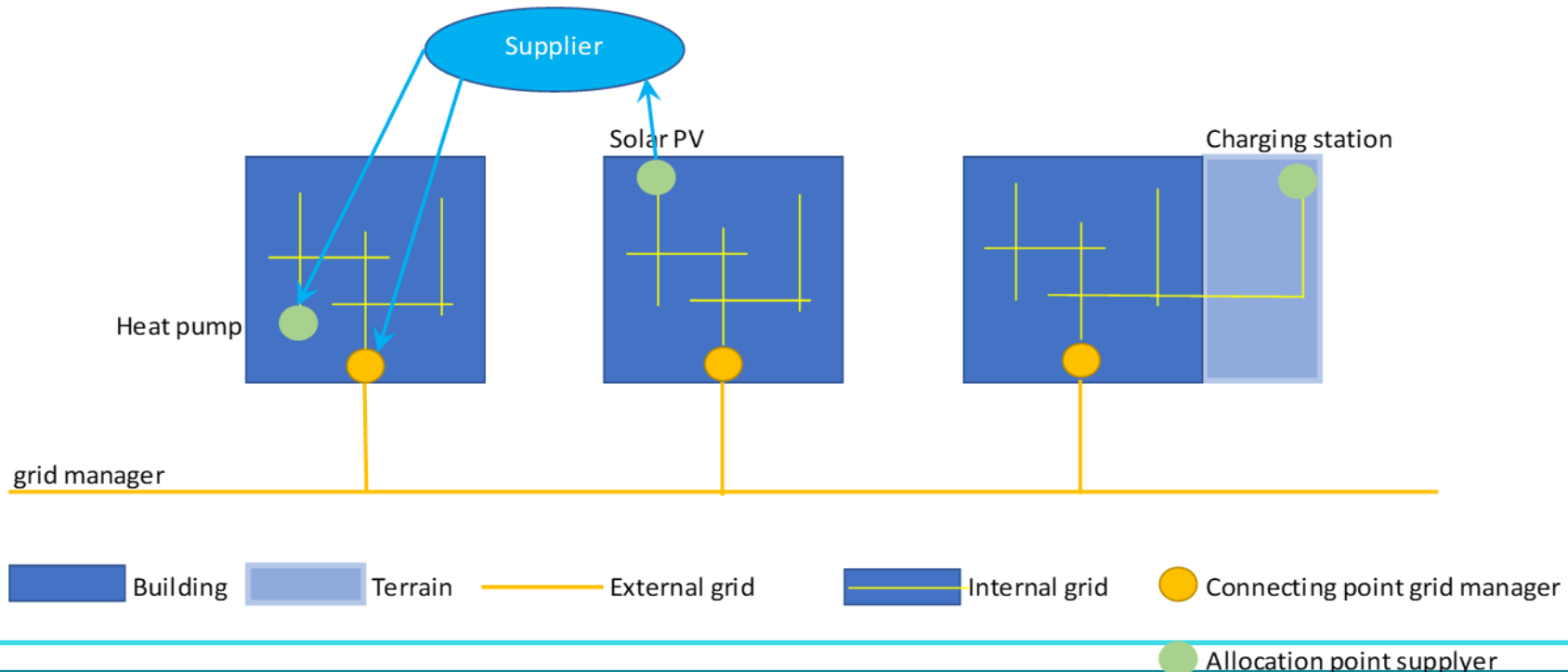
- different allocation points within one connection
- solar PV, charging station, heat pump, single machine
- extra supplier
- extra customer



# Electricity exchange

## 1 Exchange of energy via the supplier

- Supplier **buys** electricity from solar PV or wind
- Supplier **delivers** to heat pump, charging station, households





## Electricity exchange

### 1 In summary

- not possible
  - electricity exchange through direct lines
  - exchange via existing grid (you need an energy company in between)
- possible
  - exchange via a supplier (sell and buy as green energy)
  - postal code rose (investment in RE and delivering behind the meter)
  - financial participation with financial return
  - decentralized production with financial participation

## Impact of measures

### 1 Postal code rose

- postal code rose:
  - in 2016 in NL 23 projects for households and SME with approximately 5 MWp solar PV and 1.200 participants (4.000 MWh)
- SDE+ funding:
  - In 2016 € 12 billion of funding for 15 years period
  - Spring 2017 (€ 6 billion) 4.386 projects with 2.354 MWp solar PV (1.883.200 MWh)

## Future prospects

### 1 More stimulation by the national government

- our new government has not made a decision but more funding (SDE+) will probably be the case
- extension of the rules for “postal code rose” projects through larger postal code rose (the first 3 instead 4 numbers; good for projects outside cities)