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Business clusters Integrated Sustainable Energy PackageS

Solar technology on business parks

10/02/2020

Evelien Bolle, WVI

1. Maximise PV on business parks

WVI

- Develops sustainable business parks
  - Greenfields / Brownfields
  - Sustainable quality for business parks:
    19 principles for sustainable development

- Manage existing business parks
  - Unburden companies for installation PV
  - Direct line

2. Maximise PV on business parks: Greenfields

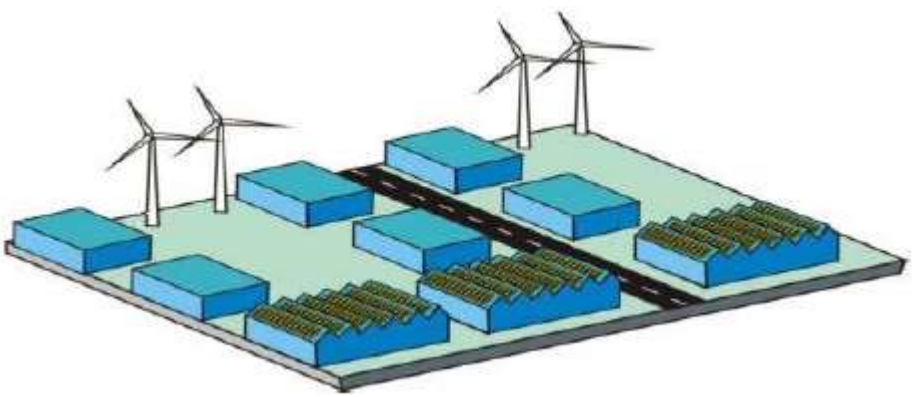
Adjusted sales conditions WVI

- Represents sustainability goals of WVI:
  - CO_2-neutrality
    - Neutral electricity consumption
    - Electricity production: neutral or compensate CO_2-emissions
  - New: Maximise renewable energy production
    - Optimal use of the roof surface

2. Maximise PV on business parks: Greenfields

Optimal use of roof surface

- Energy-efficient: use daylight
- Generate renawable energy
  - Self-consumption
  - Other companies in the vincinity
  - Electricity grid injection



2. Maximise PV on business parks: Greenfields

Goal adjusted selling conditions

- Make business parks future-proof
  - The EU winter package: local energy communities (LEC)
  - Direct lines
  - LEC and business park management

2. Maximise PV on business parks: Greenfields

Result adjusted selling conditions

- Initially companies have the invest themselves
- After 4 years: WVI can acquire the building lease
  - Start economic exploitation
  - Buyer obliged to give the necessary rights to WVI

Application of the selling condition

- Control carried out by WVI
  - At the time of purchase
  - Pro-active after 4 years

Added values for the companies

- Financial models still under development
- Return

2. Maximise PV on business parks: Greenfields

Result first study concerning LEC and business park management

- 2 cases were studied:
  - Case 1: A number of big companies with a big electricty consumption
  - Case 2: A number of SME's with small electricty consumption

- Boundary conditions for a profitable business case on PV
  - Sufficient self-consumption
  - Sufficient scale (m^2 PV)
  - Big PV installations:
    - DL to other company
    - Excess after DL to REC
  - Small PV: installations:
    - Excess energy through REC to neighbouring companies and households in vincinity

2. Maximise PV on business parks: Greenfields

Result first study concerning LEC and business park management

- Legal structure REC: cooperatives
  - Profit participation upto 6%
  - Easy to become shareholder and to leave
  - Allows participation of:
    - Municipalities
    - Citizens
    - Companies
    - Business park association

3. Business park management

Unburden companies for installation PV

- 15 companies
  - Few communication was needed
  - Limited budget

- Focus on individual companies
  - Energy ≠ core business
  - Lot of questions around PV and energy
  - Electric vehicles

- One case focusing on electricity exchange: direct line

3. Business park management

Unburden companies for installation PV

- Unburdening trajectory
  - Feasibility study: economic & technical
  - Selection of contractors
  - Ask for tenders
  - Advice on tenders

3. Business park management

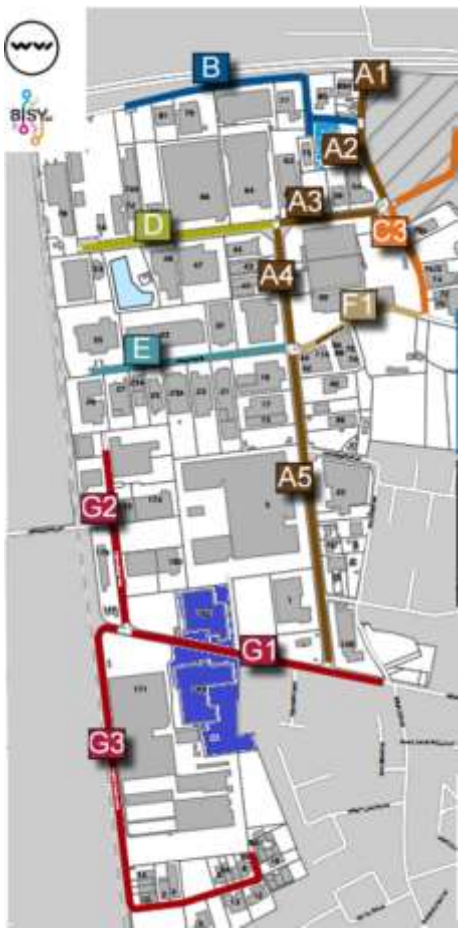
Unburden companies for installation PV

- A number of results (53 companies (Leiedal, POM en WVI)
  - Greatest bottlenecks
    - Roof stability
    - User = tenant
    - Roofs containing asbestos
    - Multi-tenant business buildings > legislation
  - Average IRR 10,7%
  - Average payback time 8,1 years

3. Business park management

Unburden companies for installation PV

- Direct line
  - Self-consumption 91%
  - Discount on the electricty price 25%
  - Greatest barriers:
    - permission VREG
    - GSC depends on ‘bandingfactor’
  - Important:
    - confidence building between businesses



Thanks for your attention