Bus Tour

Planning
17:15 – 17:45 Presentation by the energy consultants
17:45 – 19:00 Bus tour through De Maten, De Parken, Kerschoten
19:00 – 21:00 Diner
21:15 – Bus back to hotel
CvPP Community and Replication

Energieregisseur Dieuwke de Boer
De Maten
Characteristics:

De Maten is built in the 60’s.

A large park and a shopping centre in the middle.

- 26,000 residents
- 11,000 houses
- 40% is a rental property
- Average income per resident is €21,900
- 16 school buildings (14 primary schools, 2 secondary education schools)
- Average WOZ value €168,000
Complexity in the district:
- A large neighbourhood spread over 7 smaller neighbourhoods
- There are various projects in progress in the neighbourhood
- There is little social cohesion at the neighbourhood level, but there is cohesion on street level.

2 large projects:
- Connect055
- Pilot Transform

We’ll Travel through De Maten with the bustour
Gas: more than 18 million m³ (2017)
Electricity: more than 56 million kWh (2017)
De Maten; Solar power opportunities
COMMUNITY & REPLICATION

Energieregisseur
De Parken - Apeldoorn
The neighborhood

• Just over 1000 houses, mostly detached house.
• Lots of monumental buildings, protected cityscape.
• High income, high education-level, lots of entrepreneurs.
• No social-rent.
• No industry.
• A few SME.
• Some schoolbuildings.
• PV is difficult (little available roof surface).
The Parks

• Originated in 1875 (approx.)
• Situated around 4 parks:
  • het Oranjepark (1876)
  • het Wilhelminapark (1890)
  • het Prinsenpark (ca. 1909)
  • het Verzetsstrijderspark (1925-1940)
• Most houses (villas) built between 1890 en 1940, in different architectural styles.
• Protected cityscape, about 200 monumental buildings.
Energy-use / energy-labels

**average use per year**
- Gas: 3.800 m³
- Elec: 7.000 kWh
- CO2: 10.700 kg
Solar panel potential

- Limited solar panel-possibilities
  - protected city view
  - Lots of trees (large)
Disconnected from gas?

- Some houses are disconnected from gas.
- The costs are high:
  - Little insulation possible (not always cavity walls = spouwmuren).
  - Monumental buildings (monument glass)
  - Complex solutions.
- Two examples in “Burgemeester Tutein Noltheniuslaan” (bus-tour).
- Very little new buildings without gas (< 5).

<table>
<thead>
<tr>
<th>National monument</th>
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<tbody>
<tr>
<td>• Heatpomp</td>
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<tr>
<td>• Wood-burner</td>
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<td>• Solar panels</td>
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<td>• Solar water heater</td>
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<table>
<thead>
<tr>
<th>Not a monument</th>
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<tbody>
<tr>
<td>• Electrical heating (floor)</td>
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<tr>
<td>• Solar panels</td>
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<tr>
<td>• Solar water heater</td>
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<tr>
<td>• pellet stove</td>
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Initiative
Duurzame Parken

- 25 enthusiastic residents
- Different working groups
  - Long term solution (heat)
  - Information-evenings for residents
  - Lobby & Networking
  - Insulation-program
  - Calc and Math (support-group)

Goal
In 10 years: electricity fully sustainable
In 25 years: alternative for natural gas
The End
About the neighbourhood

- Built in the sixties
- 2/3 social housing
- 1/3 Private owners

- Houses are small
- Relatively low income

- Lots of green and space
- Deserves protection: example of postwar housing:
  part of National Cultural Heritage
Started in 2015:

Municipality

Volunteers

Housing corporations

Starting with community building
Social housing: insolation, and solar panels
Collaboration with the local Energy Cooperation deA
Social housing:

Insolation
Improvement of ventilation
Improvement in heating different rooms.

Gas is just for cooking. Heating by a central heat pump (gas for very cold days).
Primary school:

Project weeks on energy and sustainability
High School: white roof covering and solar panels
Private owners:
awareness and helping with purchasing
insolation
Energy Cooperation Zon op K&N
Heat network (sustainable heat from sludge treatment or sewage)
Mobuur

Transport from door-to-door
Mostly elderly people
40 volunteers

https://www.youtube.com/watch?v=ZqLOFTLizA