Dependent on your neighbours.

And other challenges for engaging homeowners in heat transition plans.

Eline van den Ende
26 juni 2019
heat transition.

- The phase-out of natural gas in the built environment, to contribute to the CO₂ emission reduction goals.

- 95% of the households has a natural gas connection.
  - 1000 houses per workday for the next 30 years.

- Municipality as the “director” of the transition.

- Neighborhood approaches to select alternatives.

How can municipalities realise a publicly accepted heat transition?
HVC.

- sustainable energy- and waste company
- public heat company
Eline van den Ende

- Complex Systems Engineering and Management, TU Delft
- Science Communication, TU Delft
- Energy Club boardmember

HVC

- Municipal advisor social processes heat transition
- Supporting role in complex stakeholder processes
- Content controll of communication means
overview.

- transition process
- design of a neighborhood approach
- pilots in Heerhugowaard and Sliedrecht
- current challenges
- future challenges
transition process.
heat transition.

Objective:
To contribute to the CO₂ emission reduction goals via the phase-out of natural gas in the built environment.

Consequence for DH industry:
From: business-to-business and demand driven
To: business-to-consumer and policy driven
heat transition.

Policy process.

Formal and informal interactions.

Focus of today
neighborhood approach
neighborhood approach.

communication strategy

support in execution

decision making process design

execution

Plan

Dialogue

Support

Decision (investment)

Content

Process

Relation

communication triangle
neighborhood approach. communication strategy

**Building dikes (buffering)**
- Non-controversial topics
- Predictable environment
- Solutions are clear
- Solutions can be compared objectively
- Decision has a low impact

**Building bridges (bridging)**
- Conflicting interests
- Unpredictable (change) environment
- Solutions are unclear
- Solutions cannot be compared objectively
- Decision has a high impact
neighborhood approach. problem characteristics

- unclear (changing) political environment
- threatening public debate
- high impact on living environment (at least on the short-term)
- behaviour change (long-term)
- (In)-finite and (partly) unknown solution space
- no carrot, no stick
- start of the s-curve
- interdependence between residents
- (potentially) heterogeneous and assymetrical power relations
neighborhood approach.
bridging

• two-way communications
• empathy
• transparency
• open to dissenting opinions
• willingness to change
neighborhood approach.
assumptions

A. Based on local and personal conditions:
   A. knowledge, experience
   B. values and normative beliefs
   C. personal characteristics
   D. personal needs

B. Sufficient time to get accustomed to change (estimated time min. 2-years).

C. Connected to a process to unburden residents to adopt change.

D. Aimed at a shared desired result.

E. Continuous sensitivity to changes in attitudes, norms etc. to quickly adapt or respond.
4 phases.

Political, technical and financial boundary conditions.

Communication strategy leading to decision making process design, which supports execution.

Phase 1: Preparation

Phase 2: Shared knowledge base and agreements

Phase 3: Decision-making

Phase 4: Execution

Resident’s input used to modify process to fit locally.
Example 1: Heerhugowaard
District heating contracted.
preparation.
boundary conditions

- Expansion of existing DH network (BIO-based).

- Signed contract for housing agency houses in 50% of the district.

- Time pressure as a result of delayed district-improvement project.
preparation.
survey

- Response: 67/ ~150

- 80% is aware of transition
- general attitude is slightly positive
- Negative reactions: high (expected) costs,

- 20 people want to participate: “meedenken”
- 39 want to be informed
- 3 have no interest

Attitude towards transition

- Positive
- Neutral
- Negative
knowledgable base and agreements.

2 evenings for homeowners
   • 1 for households in “heart”
   • 1 for households in “wings”

Topics:
1. Heat transition
2. Project introduction
3. Decision space homeowners
4. Next steps
knowlegde base and agreements.
content – cards

Waar wilt u het de volgende keer over hebben?

- Investeringskosten
- Aanpassingen aan het huis
- De energierekening
- Techniek
- Leveringszekerheid
- Keuzevrijheid
- Toekomstbestendigheid
- De waarde van mijn woning
- Organisatie
- Eerlijkheid
- Energiebesparing
- Veiligheid
- Wooncomfort
- Beter klimaat
- Duurzaamheid
- Anders, namelijk:
- Gebruiksgemak

- House-scans to identify modifications & corresponding costs
- Easy access to a local model home.
- Development of online tool to calculate personal financial consequences.

house - scans to identify modifications & corresponding costs. Easy access to a local model home. Development of online tool to calculate personal financial consequences.
knowlegde base and agreements.

Content:
1. Investment costs
2. Home alterations
3. Energy bill

Process:
1. Municipality is in charge
2. Residents have freedom of choice
3. All alternatives will be researched

Relation:
1. Informal
2. Reliable
3. Supportive
knowlegde base and agreements.
decision-support.
next step

• “kitchen table talks” per street
• walk-in hours

• letters of intent
Example 2: Sliedrecht
District heating contracted.
preparation.
boundary conditions

- Municipal DH network on GEO as main solution,
- Min. 2500 houses in Sliedrecht (same in Papendrecht)

- €3.8 mln. subsidy for development of DH in district Oost
- ~ €400.000 process budget
- ~ 2 years from kick-off to decision

- Combined with re-design of public area.
- ~ 2000 households, 50% privately owned, 50% social housing agency
preparation.  
survey

- Response: 496/2000
- 90% is aware of transition
- general attitude is slightly positive
- Negative reactions: unnecessary (high) costs, age resident, nonsense
- 121 residents signed-up for participation
- 65+ group is underrepresented
- higher response amongst homeowners than tennants
- little-to-no neighborhood initiatives

Attitude towards transition

- Positive
- Neutral
- Negative
knowledge base and agreements.

content - cards

Waar wilt u het de volgende keer over hebben?

Investeringeskosten
Aanpassingen aan het huis
De energierekening
Techniek
Leveringszekerheid
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Toekomstbestendigheid
De waarde van mijn woning
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Wooncomfort
Beter klimaat
Duurzaamheid
Anders, namelijk:
Gebruiksgemak

Artikel over freedom of choice.

Transparantie over de verdeeling van de subsidie.

Sharing experiences of early movers plus “70°” action.
knowledge base and agreements.

Next step

- Process design meeting with residents: *(Objective & boundaries municipality)*
  - What do you find important?
  - What is necessary to achieve this?
  - What do you want contribute personally?
  - What do you expect from the project group?

- Process *agreements* based on values: process, content and relation. Plus controll mechanism.

- Organisation of executive organisation.

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<tr>
<th>Process</th>
<th>Content</th>
<th>Relation</th>
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<td>Aesthetic</td>
<td>Personal</td>
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challenges
challenges.
relation - Heerhugowaard

Heerhugowaard
• no desire to participate.
• trust
• suspicion

Sliedrecht:
• different perspectives on ambition.

General:
• “answers” versus “early engagement”.
• “knowlegable” or “vulnerable”
challenges.
process

- New roles for professionally engaged stakeholders.
  - *New collaborations*
  - *New audience*
  - *Changing surroundings*

- Representation issues residents.

- Slow process: new challenges & desire to tailor to needs.
challenges. process

Existing processes are:

- business-to-business oriented
- consumer oriented: collective purchase of a single sustainability measure, instead of a “full package deal”

Future processes require:

- Policy driven, business-to-consumer oriented
  - Majority decisions?
  - Both interdependent decisions and individual decisions.
- Interdependent decision making in a social/neighborhood setting.
challenges. content

Existing communication means are targeted at:

• “early movers”
  • complex technical information
  • focussed on “sustainability”
• tennants and new home owners
  • “buffering”
  • explaining changes

Future communication means should support:

• “early and late majority”
  • relatable and concise
  • “normalizing change”
Gebruik deze knoppen om gebruik te maken van een kop (rood) en opsommingstekens (drie niveaus):

- Kop
- Bullet niveau 1
- Bullet niveau 2
- Bullet niveau 3

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