

# Empowering Energy Transition

## Enhancing Participation Through the BouwApp

### Context

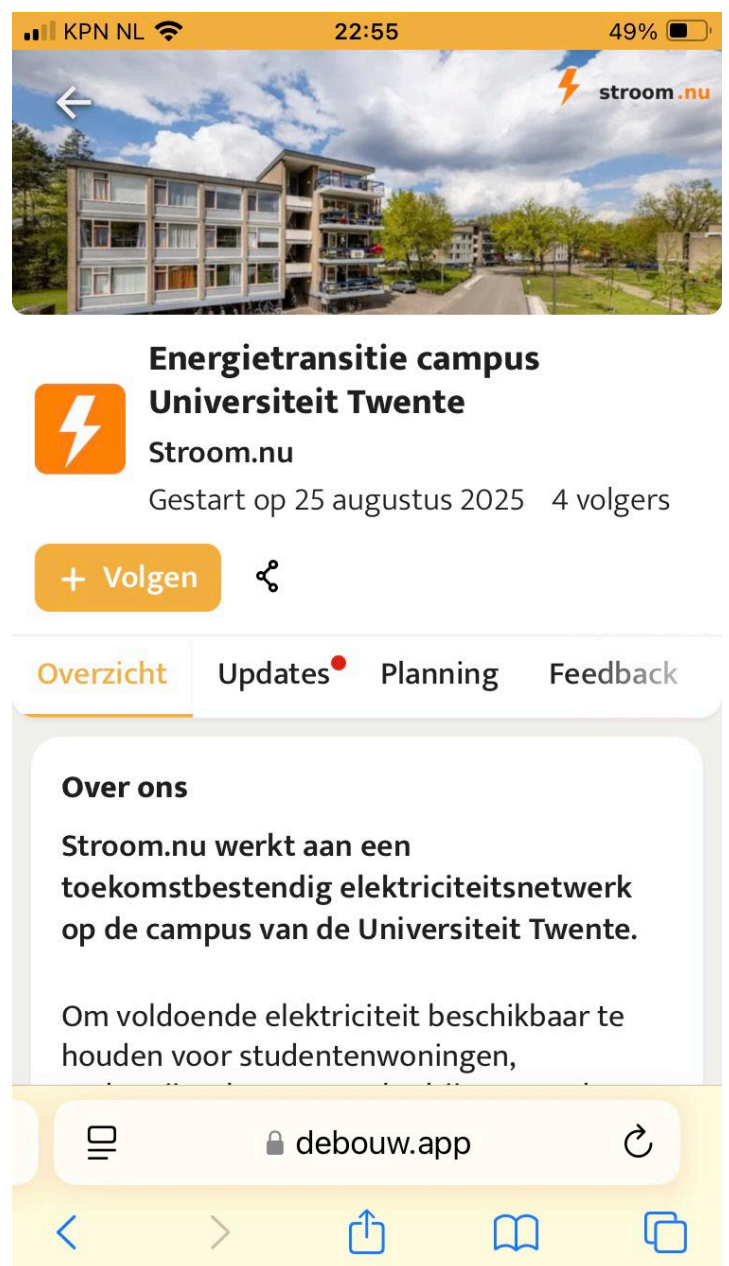
The Netherlands is rapidly expanding its energy infrastructure to support the national transition towards sustainable power systems. One of the challenges associated with this goal is integrating new transformer houses into the existing landscape. Public resistance regarding these houses can delay the energy transition. Misunderstandings, lack of transparency, and weak feedback loops create a gap between technical decisions and local communities. This project reimagines the use of the BouwApp as a participatory communication tool that bridges this divide.

### Digital Platform for Transparency

The BouwApp is used as a digital participatory tool to inform, involve, and engage residents, those affected, and staff in the siting and design of new transformer houses. By making technical information transparent and interactive, the app transforms complex engineering communication into accessible dialogue.

### Expected Outcome

- ~30% reduction in repetitive information handling (Dane, 2024)
- 10-15% potential shortening of project delays (PBL, 2022)
- 15-20% acceptance or satisfaction increase (Quick, 2016)



## Our addition to the BouwApp

1. Design Variation: Residents can explore 3D models of alternative transformer house designs directly in the app, aiding with accessible spatial storytelling.
2. Structured Feedback: A moderated comment system and voting tools allow participants to voice opinions constructively. Automatic summarisation provides insights.
3. Responsive Communication: Push notifications and transparent feedback reporting ensure questions receive timely responses, building fairness and accountability.
4. Transparent dashboard: Users can follow progress, decisions, and design adaptations in real time. This replaces fragmented communication and enhances traceability.

## Future Outlook

The addition to the BouwApp serves as a proof of concept for participatory energy planning, demonstrating how digital tools can actively engage residents and stakeholders in the decision-making process. By integrating interactive visualisation of design variants, structured communication channels, and responsive feedback mechanisms, the app not only clarifies technical and spatial decisions but also fosters transparency and trust. In doing so, it paves the way toward systemic improvements in participatory governance.

## View more via:

<https://debouw.app/projects/energietransitie-campus-univeriteit-twente>

<https://www.debouwapp.nl/blog/communiatie-energietransitie/>

## Sources:

Dane, G.E. (2024). Experiencing the future: Evaluating a new framework for the participatory co-design

Quick, K. (2016). Quick & Bryson 2016 theories of public participation

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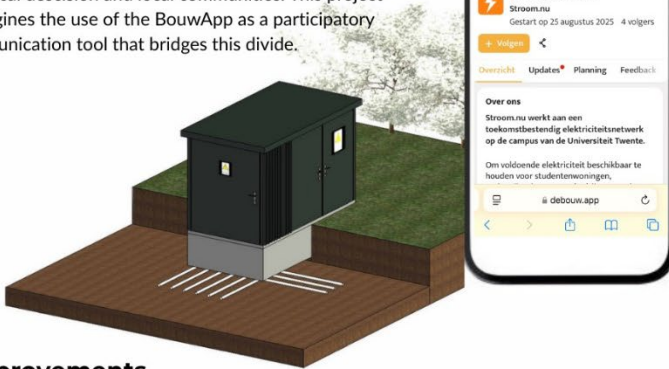
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The Netherlands is rapidly expanding its energy infrastructure to support the national transition towards sustainable power systems. One of the challenges that comes with this goal is the integration of new transformer houses into the existing landscape. Public resistance regarding these houses can delay the energy transition. Misunderstandings, lack of transparency, and weak feedback loops create a gap between technical decision and local communities. This project reimagines the use of the BouwApp as a participatory communication tool that bridges this divide.



### Digital Platform for Transparency

The BouwApp is used as a digital participatory tool to inform, involve, and engage residents, affected, and staff in the siting and design of new transformer houses. By making technical information transparent and interactive, the app transforms complex engineering communication into accessible dialogue.

### Expected Outcome

- ~30%** reduction in repetitive information handling (Dane, 2024)
- 10-15%** potential shortening of project delays (PBL, 2022)
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### Improvements

#### 1 Design Variation



Residents can explore 3D models of alternative transformer house designs directly in the app aiding with accessible spatial storytelling.

#### 2 Structured Feedback



A moderated comment system and voting tools allow participants to voice opinions constructively. Automatic summarisation provide insights.

#### 3 Responsive Communication



Push notifications and transparent feedback reporting ensure questions receive timely responses, building fairness and accountability.

#### 4 Transparent dashboard



Users can follow progress, decisions, and design adaptations in real time. This replaces fragmented communication and enhances traceability.

### Future Outlook

The redesigned BouwApp serves as a proof of concept for participatory energy planning, demonstrating how digital tools can actively engage residents and stakeholders in decision-making. By integrating interactive visualisation of design variants, structured communication channels, and responsive feedback mechanisms, the app not only clarifies technical and spatial decisions but also fosters transparency and trust. In doing so, it paves the way toward systemic improvements in participatory governance.

#### Impact Pathway

Output: Communication adjustment  
Outcome: Improved satisfaction

#### Pilot Case

Test enhanced Bouwapp in real-world project

#### Hybrid Setup

Combine digital tools with offline methods

#### Feedback Loop

Close the loop between public input and decision making

#### Practice Shift

Embed digital co-creation

#### View more via:

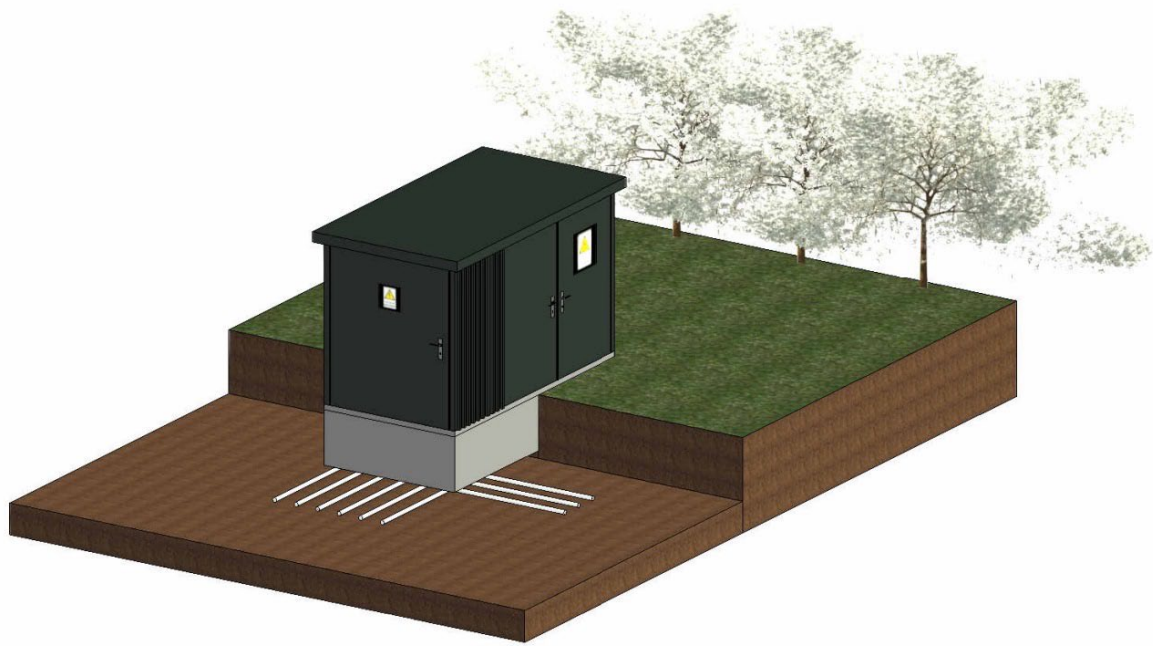
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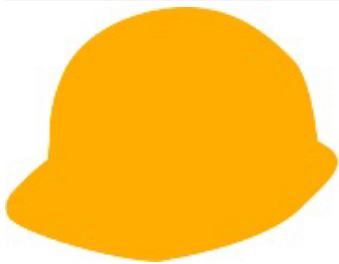
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PBL. (2022). *Self-evaluation for scientific audit*  
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**de BouwApp.**