

The logo for Stevin Technology Consultants features the word "STEVIN" in a bold, red, sans-serif font. To the right of the text is a red gear icon with a white center. Below the main text, the words "TECHNOLOGY CONSULTANTS" are written in a smaller, red, sans-serif font.

STEVIN 

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Activating Potential

The background of the slide is a dark, monochromatic image of a modern building's interior. A person is silhouetted against a large window, looking out. The building's structural elements, including beams and columns, are visible, creating a complex geometric pattern. The lighting is dramatic, with the person and the window area being the brightest parts of the scene.

Energy meets Mobility

Synergy in Transportation Hubs

10 June 2020

Welcome on our journey towards energyhubs!

Nieuws • Energieia vr 22 mei

Minister wijst energy-hubs aan in landelijke richtlijn voor energie-infrastructuur

Minister Wiebes wil plekken aanwijzen in Nederland waar veel energie samen zal komen en dit energy-hubs noemen. Zo kunnen netbeheerders investeren in de uitbreiding van energienetten op die plekken. Dat blijkt uit een eerste aanzet tot een landelijke richtlijn voor energie-infrastructuur, die de minister heeft gepresenteerd.



Source: Energieia, 22 May 2020

An energyhub connects energy users and producers in a smart way to the grid. This is especially relevant for multi-modal transport stations with limited available physical space

While energyhubs have great potential, collaboration remains a challenge

The benefits of an energyhub are:



Different stakeholders are involved, each with their own interests and needs



A coordinator for the energyhub has multiple roles which vary over time

During different events, roundtables and discussions, different stakeholders have expressed the need for a body which coordinates and presides over the collaborative process of energyhubs

A coordinator focuses on the development of a common vision, process facilitation and stakeholder management

Design

Construction

Operation & Maintenance

Governing without a neutral coordinator leads to suboptimal short-term solutions

- ▶ The specific role and responsibilities of a coordinator have yet to be determined
- ▶ Having a stakeholder-bound coordinator ensures a focus on their interests and needs

 **This leads to short-term and biased solutions**

A neutral coordinator contributes to greater financial, environmental and societal benefits



Optimization of financial, environmental and societal benefits requires an objective point of view

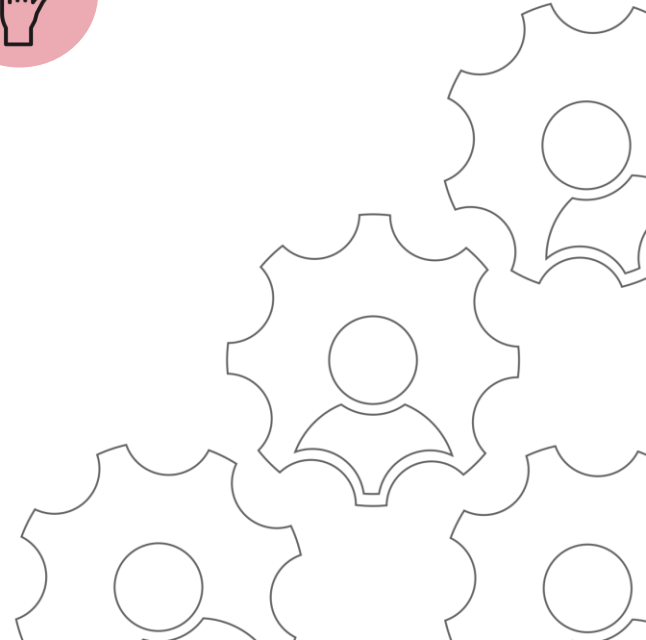


A neutral party, aiming to optimize the benefits, can take all parties' interests and needs into account and balance this towards an optimal stage for the bigger picture



Therefore, having a neutral and collectively approved coordinator is the key to enabling optimal financial, environmental and societal benefits

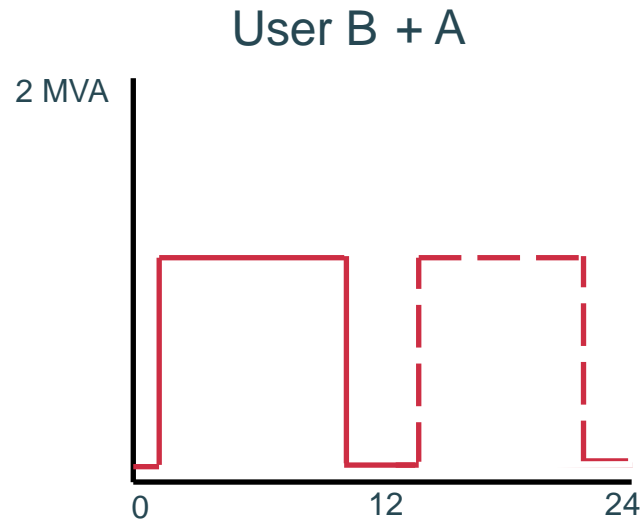
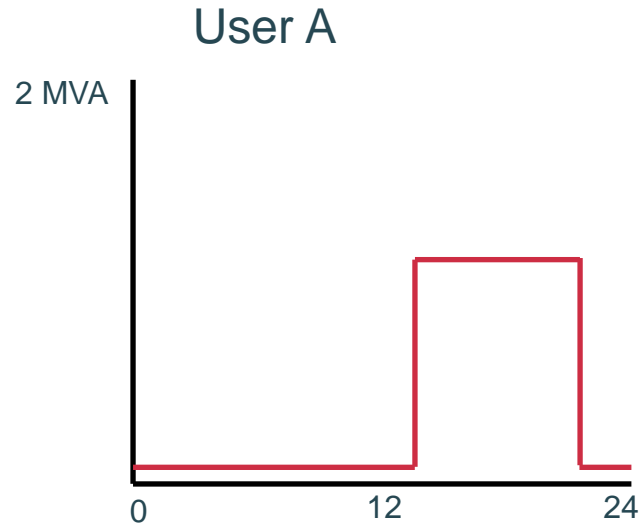
Challenges in creating an energyhub



Aligning the various electricity demands into the optimal size of the grid connection(s) is hard



Example



There is an uneven distribution of costs and benefits between the parties involved



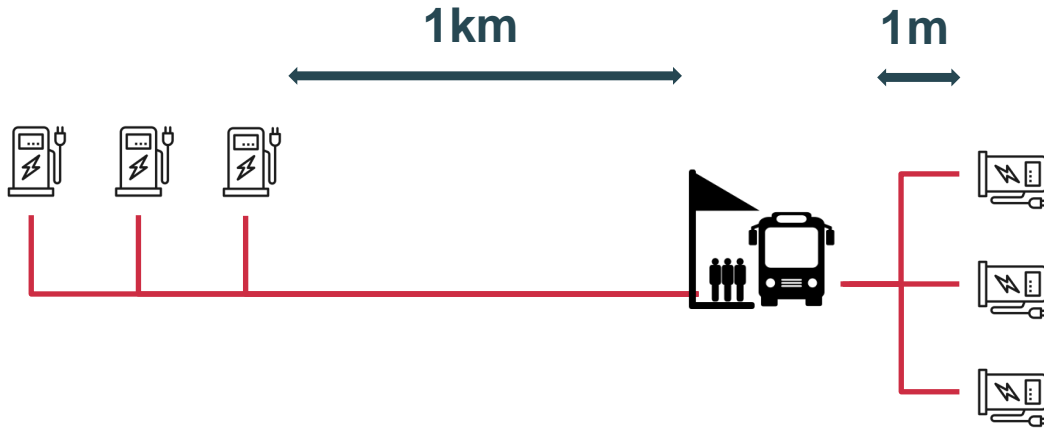
High investment costs for the **first mover**

Grid connections have high **public costs**

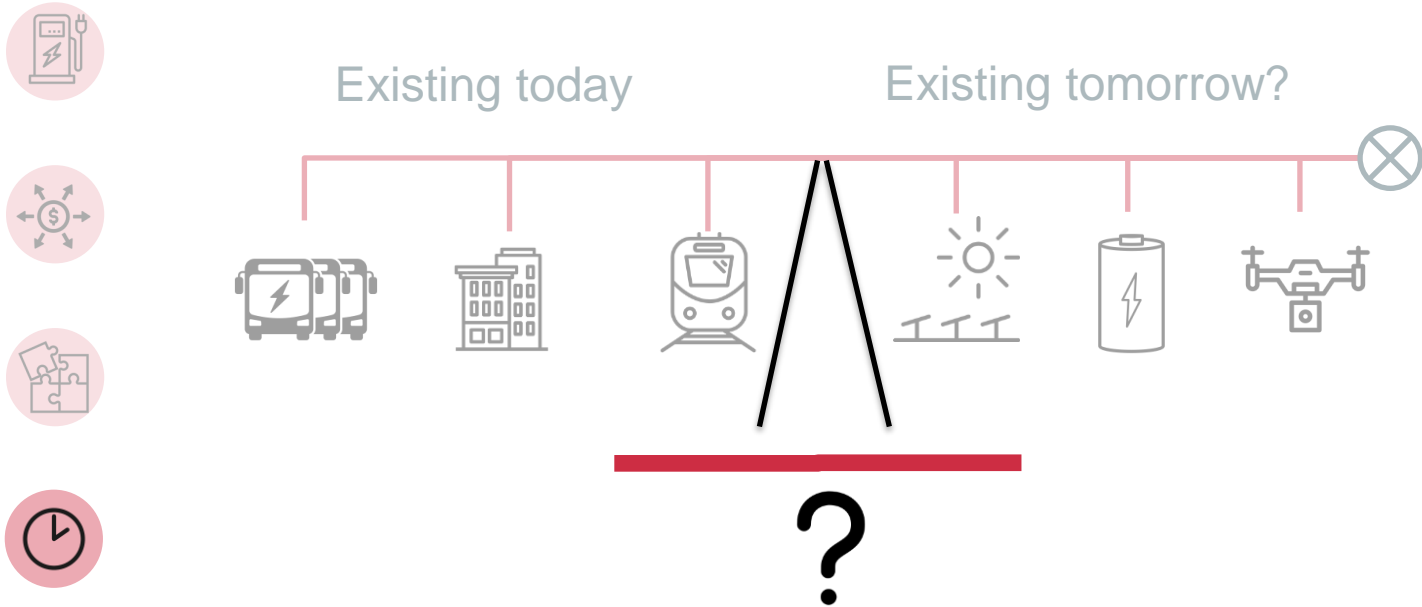
The trade-off between different interests and spatial integration is a challenge



Different interests of the parties involved pose a challenge for **spatial integration** and maintaining **low operational costs**



Early attention for long term needs provides flexibility and cost reductions on the long run



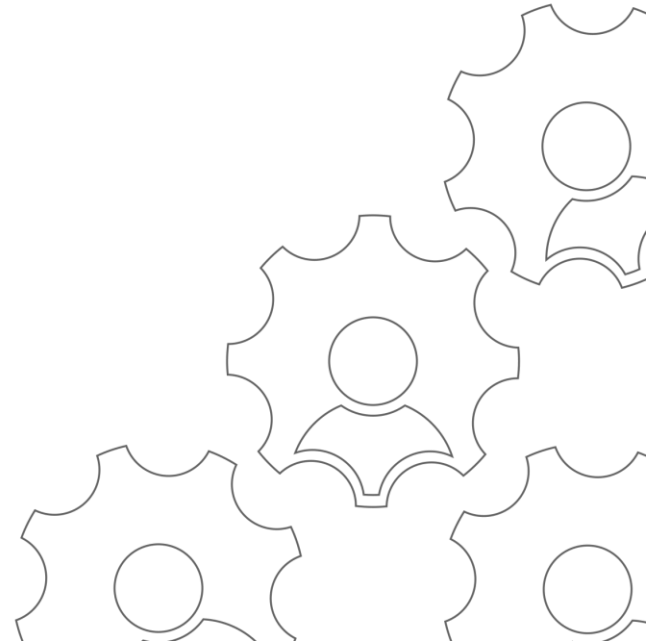
The municipality is in the right position to take the initiative on coordinating energyhubs

The perspective in the past

In the past, the municipality has been named as the logical coordinator, given its responsibilities for public space

Taking the initiative from here...

Q&A



**For further information or a digital cup of coffee,
feel free to get in touch!**

Rogier Pennings
pennings@stevin.com

Luuk van Loosdrecht
vanloosdrecht@stevin.com



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