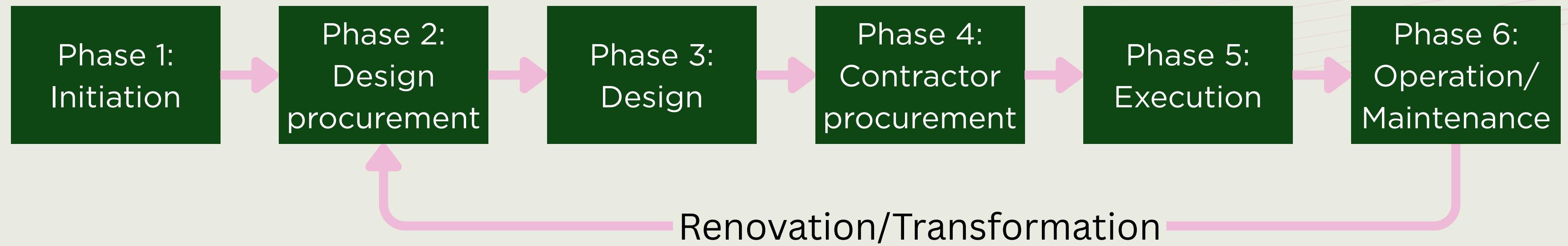


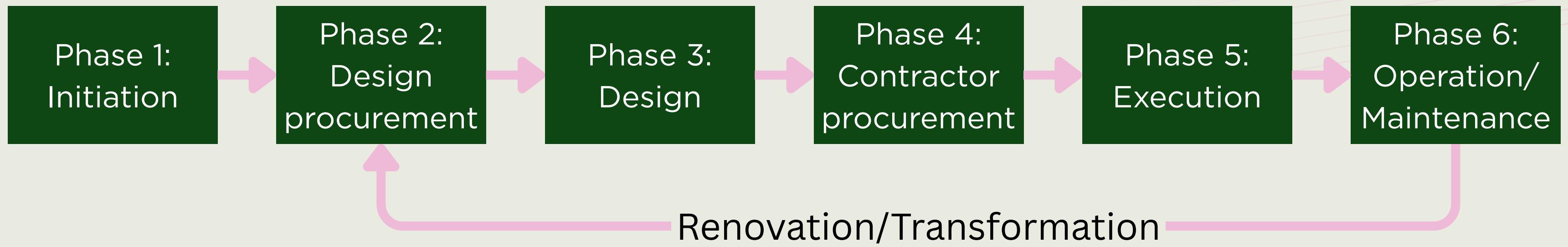
ARE YOU FAMILIAR WITH OUR CONCEPT?

Understanding how Bouwstromen shape collaboration and conceptual
housing delivery in the Netherlands

TRADITIONAL PROJECT LIFECYCLE

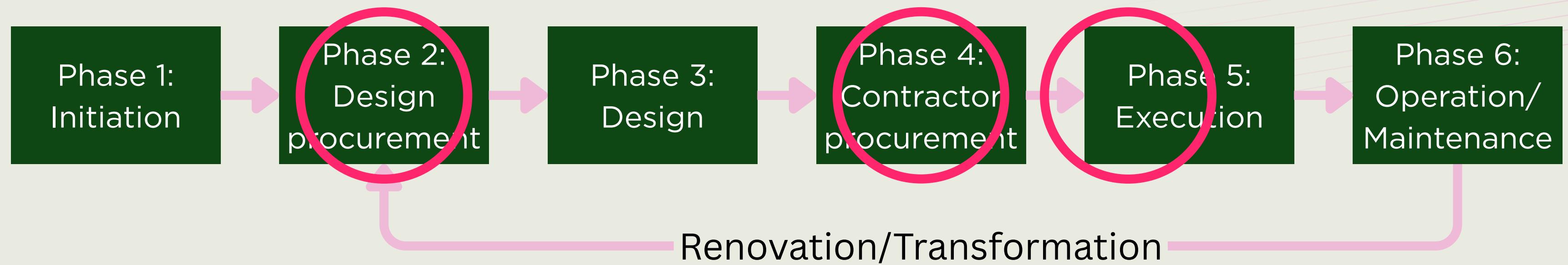


TRADITIONAL PROJECT LIFECYCLE



- 4 - 8 years

TRADITIONAL PROJECT LIFECYCLE



- 4 - 8 years
- Permits & procurements

WOONST 1.0 - BOUWSTROOM EINDHOVEN

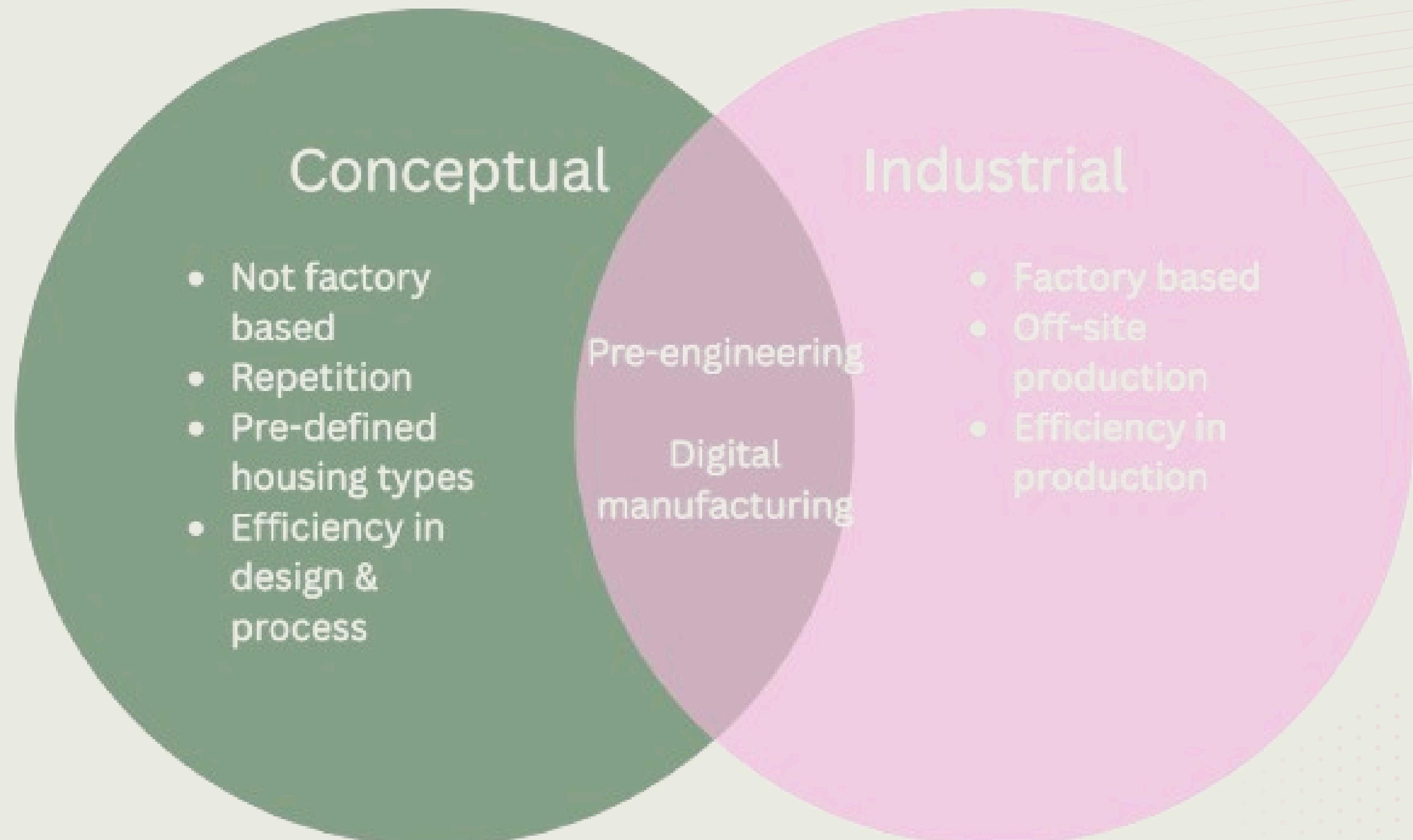
- Initiated by municipalities in the MRE
- 13 housing associations, 9 municipalities
- One procurement in 2021
- Objectives: lower building costs and faster building process
- 1000 conceptual social housing

BOUWSTROMEN



(Aedes, 2024)

CONCEPTUAL VS. INDUSTRIAL





RESEARCH

- Main question: “*What is a Bouwstroom and how does the implementation change collaboration in urban development projects in the Netherlands*”
- Sub questions:
 - *How do actor roles and responsibilities change within a Bouwstroom compared to traditional construction processes?*
 - *What collaboration challenges and opportunities do actors perceive when working within a Bouwstroom?*
 - *How does the governance structure of a Bouwstroom facilitate or hinder collaboration between actors?*
 - *How can Bouwstromen contribute to the broader adoption of IC methods in urban development projects?*

METHOD

WHAT

Interviews

Case studies

Total

METHOD

- Housing associations
- Contractors
- Municipalities

- WoonST 2.0
- Bouwstroom Haaglanden
- NH Bouwstroom

- 17 interviews

CASE STUDY 1 | WOONST 2.0

WHAT

METHOD

Launch

July 2024

Partners

13 housing associations + 9 municipalities + 2 contractors

Target

2500 social housing units by 2030





CASE STUDY 2 | BOUWSTROOM HAAGLANDEN

WHAT	METHOD
Launch	September 2024 (pilot)
Partners	13 housing associations + 2 contractors
Target	2000 homes by 2028





CASE STUDY 3 | NH BOUWSTROOM

WHAT	METHOD
Launch	2021
Partners	11 housing associations + 6 contractors
Target	750 homes per year (over the next 10 years)





SQ 1: HOW DO ACTOR ROLES AND RESPONSIBILITIES CHANGE WITHIN A BOUWSTROOM COMPARED TO TRADITIONAL CONSTRUCTION PROCESSES?

WoonST 2.0

NL |

“Er zijn collega’s die moeite hebben met het feit dat niet meer alles zelf ontworpen wordt. Ze moeten ineens vertrouwen op wat er al ligt.”

ENG |

“There are colleagues who have difficulty with the fact that not everything is designed by themselves anymore. They suddenly have to rely on what is already there.”

Bouwstroom Haaglanden

“Als de gemeente niet meebeweegt, krijgen wij de verantwoordelijkheid voor de risico’s rondom het volume en de doorlooptijd.”

“If the municipality does not move along, we will be responsible for the risks surrounding volume and lead time.”

NH Bouwstroom

“Er was geen verplichting, maar wel een gedeeld besef: als we dit niet doen, blijven we ieder voor zich rommelen en dan gaan we het tempo nooit halen.”

“There was no obligation, but there was a shared realization: if we don’t do this, we will continue to struggle on our own and we will never reach the pace.”

SQ 2: WHAT COLLABORATION CHALLENGES AND OPPORTUNITIES DO ACTORS PERCEIVE WHEN WORKING WITHIN A BOUWSTROOM?

WoonST 2.0

NL |

“We zijn eraan gaan wennen dat je binnen kaders werkt, en dat die kaders eigenlijk best goed zijn.”

ENG |

“We have become accustomed to working within frameworks, and that those frameworks are actually quite good.”

Bouwstroom Haaglanden

“Je blijft bij elke gemeente opnieuw uitleggen dat het een standaardproduct is, maar ze behandelen het alsof het een uniek ontwerp is.”

“You keep explaining to every municipality that it is a standard product, but they treat it as if it were a unique design.”

NH Bouwstroom

“We praten veel, maar het blijft lastig om echt routine te krijgen. Iedereen werkt toch nog een beetje op z’n eigen manier”

“We talk a lot, but it remains difficult to really get into a routine. Everyone still works in their own way.”

SQ 3: HOW DOES THE GOVERNANCE STRUCTURE OF A BOUWSTROOM FACILITATE OR HINDER COLLABORATION BETWEEN ACTORS?

WoonST 2.0

NL |

“Bij WoonST is er in de aanbesteding gekozen om corporaties en gemeenten te betrekken. Die hebben samen de samenwerking ondertekend.”

ENG |

“At WoonST, the tender was chosen to involve corporations and municipalities. They signed the collaboration together.”

Bouwstroom Haaglanden

“De coördinatie is onze smeerolie, maar we moeten oppassen dat die niet opdroogt.”

“Coordination is our lubricant, but we have to be careful that it doesn't dry up.”

NH Bouwstroom

“Het bestuur ziet exact wat een woning kost in 2026 en 2027. Dat maakt het makkelijker om investeringsbesluiten in serie goed te keuren.”

“The board sees exactly what a home will cost in 2026 and 2027. That makes it easier to approve investment decisions programmatically.”

SQ 4: HOW CAN BOUWSTROMEN CONTRIBUTE TO THE BROADER ADOPTION OF IC METHODS IN URBAN DEVELOPMENT PROJECTS?

WoonST 2.0

NL |

“We zijn gaan kijken naar onze voorraad en plannen met een ander oog, meer vanuit herhaalbaarheid dan uniek ontwerp.”

ENG |

“We started looking at our inventory and plans with a different eye, more from a repeatability perspective than a unique design perspective.”

Bouwstroom Haaglanden

“We proberen zoveel mogelijk variatie aan te bieden, maar zelfs met 89 varianten zijn er plekken waar het niet helemaal past.”

NH Bouwstroom

“We willen standaardiseren, maar geen enkele locatie is echt standaard. Je moet altijd iets aanpassen om het passend te maken.”

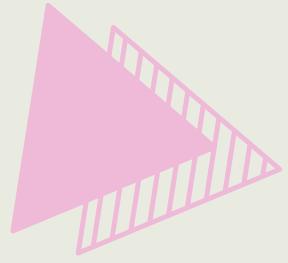
“We want to standardize, but no location is really standard. You always have to adjust something to make it fit.”

WHAT IS A BOUWSTROOM...?

“A Bouwstroom is an innovative governance model that coordinates actors across public and private sectors to streamline housing delivery through standardized concepts and long-term collaboration, shifting from project-based to program-based development.”

...and how does the implementation change collaboration in urban development projects in the Netherlands?

- Early and continuous involvement
- Role reconfiguration
- Programmatic governance
- Persistent challenges
- Standardization (while staying flexible)
- Trust and no ‘re-learning’



Bouwstromen recast isolated building projects into continuous, conceptualized production flows, realigning actor responsibilities, embedding collaborative governance and accelerating housing delivery through standardized, repeatable processes

Thank you! Questions?