



National Housing  
Maintenance Forum

# NHMF Study Tour 2026

# Welkom!

The Hague, Netherlands  
13th - 15th May 2026

**15:00 – 15:10 - Julian Ransom (ION) Welcome briefing**



**The Hague, Netherlands**  
13th - 15th May 2026

# Welcome/ Welkom briefing

## 1. Welcome / Welkom

## 2. Context of this study trip

- Objectives: learning + sharing good practice in the provision of social/public housing ....  
*Key principles of the National Housing Maintenance Forum*

Exploring alternative solutions to similar challenges

- Previous visits/ locations:  
Sweden, Denmark, the Channel Islands, Austria, Freiburg, Amsterdam, Rotterdam, Ireland, Cardiff, Glasgow, London, Oxford and many others
- In 2024, we visited Sweden as guests of the City of Stockholm [nhmf-study-tour-report\\_final.pdf](#)
- In 2025, we visited Germany as guests of the City of Berlin [Berlin](#)
- Lasting contacts established and joint projects initiated (Berlin apprentices / 'Energy Community')

## 3. Thanks to all our Den Haag hosts + trip co-organisers

- Ben Virgo [Nov pre-visit photo] Effie Matthaiou (M3 Housing)
- Wies Ettema + Boris Minkes (City of The Hague)
- Tim Wolters (AEDES)
- Thomas Knox (NVG Solicitors)
- Haag Wonen (1 of 3 largest housing corporations in the Hague 22,000 homes)
- And many more you will hear from over coming days .....



# Welcome/ Welkom briefing



## 4. Why the Hague?

- Our Berlin Hosts recommended it!
- The Netherlands has the closest equivalent Social Housing model to the UK
- Many similar challenges
- Den Haag is beautiful, historic and of cultural significance
- Administrative capital: Seat of Dutch Parliament, the Head of State's palace, museums, UN international Court of Justice
- An 11-kilometre beach *and of course, the sun always shines in Den Haag*
- Comparable to which UK City?
  - > Population (circa 570k) = Sheffield or Glasgow
  - > AI: London / Southend on Sea? *You decide .....*



## 5. Introductions (around the room)

- *Who you are*
- *Where you work + role*
- *Are you presenting .....* ?



The Hague, Netherlands  
13th - 15th May 2026

## THANK YOU

Ben ..... A very brief run through the programme

# Day 1 | Wednesday 13th May

**Venue:** AEDES

**Presentations:**

AEDES: historic overview Dutch social housing sector/sustainability

Haag Wonen: renovation project briefing

**Site visit:** Renovation project + contractor presentation

**Dinner:** Historic restaurant (meet 19:00 tonight)

# Day 2 | Thursday 14<sup>th</sup> May

**Venue:** Hague Humanity Hub

**Presentations:**

History of public housing Netherlands & the Hague

Retrofit, renovation and energy poverty

Social housing across Europe

Tackling mould and moisture

Retrofit: Law, local gov & the coming EU compliance agenda

Haag Wonen: Practical Asset Management

**Site visit:** Hague walking tour

**Dinner:** Beach restaurant

# Day 3 | Friday 15th May

**Venue:** City of the Hague City Hall

## **Presentations:**

BRE: using building data to shape policy, investment and delivery

European Federation for Living

City of the Hague: collaboration with Dutch HAs

CIH: Comparisons with the UK

**Site visit:** Haag Wonen / City of the Hague collaborative project

**15:10 – 15:40- Tim Wolters (AEDES)**

**Historical Overview Dutch Social Housing sector and Sustainability Performance Agreements**



**The Hague, Netherlands**  
13th - 15th May 2026



# The Dutch Social Housing System – Historical Overview and Sustainability Performance Agreements

**13 May 2026**

**Tim Wolters**

vereniging van  
woningcorporaties





So corporations borrow from banks  
to build homes...

## Social housing in the Netherlands: Key Characteristics

**Starting point: Clear legislation**, such as the Housing Act, determine the domain in which housing associations operate

- **Housing associations** operate as private (non-governmental) non-profits with a public mission
- **Large sector:** Around 30% of all residential dwellings owned by social housing providers
- **Regulated rents:** Based on quality criteria, and influenced by rent allowance thresholds
- **State aid** primarily through indirect bank guarantees for loans
- **National regulator / independent oversight:** Social Housing Authority

# Historical Overview

# Until 1901 Philanthropic Capitalism

- *Initiatives by civil society*
  - Often linked to religious factions, employers, or social movements
- Idealistic and pragmatic motivations
  - Educating and uplifting the population
  - Preventing the spread of infectious diseases
  - Improving the productivity of workers

# 1901 – WWII: The Origins of the Housing Act

- **1901: Housing Act**
- Public intervention in the market
  - Minimum quality standards (kitchen, shower, plumbing)
  - Responsibility assigned to municipalities
  - Role of Municipal housing companies
- Authorised institutions
  - Financial support vs rules, supervision, and approval
  - Surpluses reinvested in social housing
- 1913: Establishment of the National Housing Council (predecessor to Aedes)



# 1901 - WOI

## Important contribution to society

- Factory towns
  - Improved housing for workers
- Emphasis on quality and architecture
  - ‘Amsterdam School’
  - Socialist origins



Michel de Klerk



# The Housing Act: A constant presence since 1901

- Housing Associations:

*Operate exclusively in the public interest of housing*

- This provision forms the core of the housing association system and is a key factor in its success.
- Financial instruments should exclusively serve the public interest of housing; profits reinvested in social housing

## Housing Act 1901

### Artikel 31.

1. Bij besluit van den gemeenteraad kunnen onder nader bij algemeenen maatregel van bestuur te regelen voorwaarden aan vereenigingen, vennootschappen en stichtingen uitsluitend in het belang van verbetering der volkshuisvesting werkzaam en als zoodanig door Ons, Gedeputeerde Staten gehoord, toegelaten,

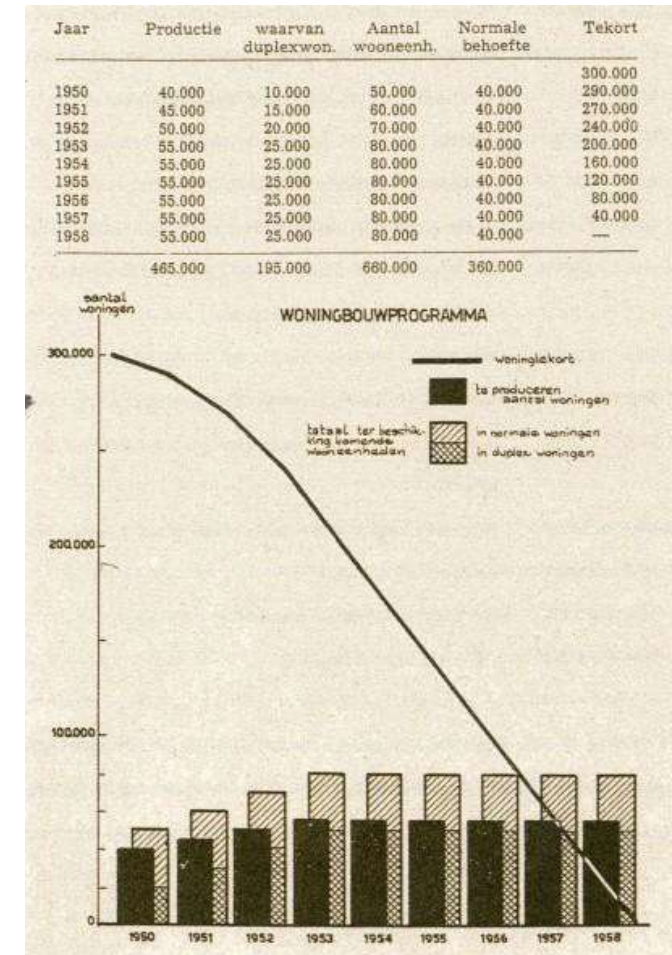
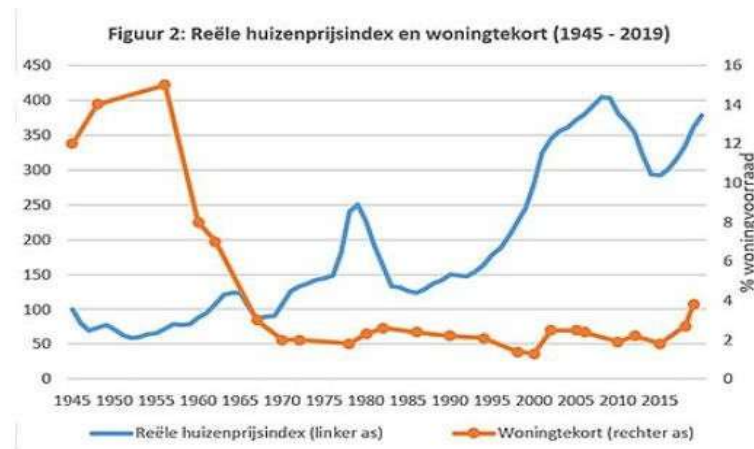
## Housing Act 2015

### Artikel 19

1. Onze Minister kan verenigingen met volledige rechtsbevoegdheid en stichtingen die zich ten doel stellen uitsluitend op het gebied van de volkshuisvesting werkzaam te zijn en beogen hun financiële middelen uitsluitend in het belang van de volkshuisvesting in te zetten, toelaten als instellingen, uitsluitend in het belang van de volkshuisvesting werkzaam. In het daartoe strekkende verzoek vermeldt de vereniging of de stichting in elk geval de gronden voor dat verzoek, de gemeente waar zij voornemens is woonplaats te houden en de gemeenten waar zij voornemens is feitelijk werkzaam te zijn.

# After WWII

- Housing shortage: public enemy nr. 1
  - Strong role central government in addressing the shortage
  - Centrally coordinated planning
  - Government loans and subsidies
  - Housing associations were de facto implementing organisations of government housing policy



# PERIOD 1965 - 1995



Cie. De Roos



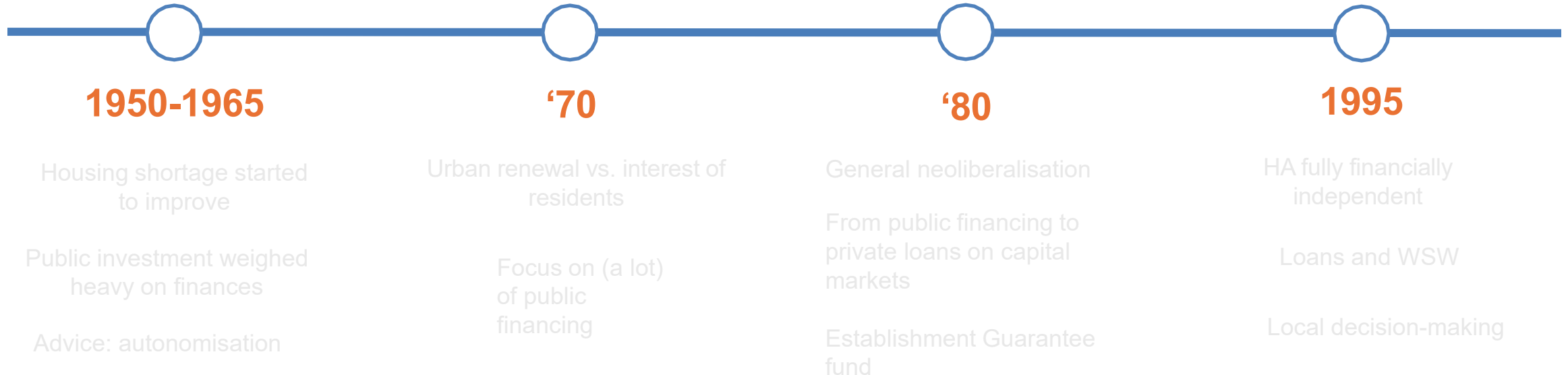
Stas. Schaefer



Slow retreat central government



Operation Heerma Bruterig



# Autonomisation since 1995

- Social Housing Management Decree: Independent housing associations operating with public guidelines (performance focused)
- Financial position: Financially independent, strengthened through refinancing
- Municipalities often looked at HAs to finance public projects
- Strong involvement (re)development neighbourhoods and communities
- Renters as 'consumers'

# Perverse incentives leads to a parliamentary enquiry 2012-2014

- Financial and executive mismanagement
- Call for a parliamentary enquiry
  - Failing directors
  - Failing internal and external supervision
  - Failing political oversight
  - Systemic flaws



Broad support and urgency for new legislation: Housing Act 2015

# 2015 : A distorted balance and the rise of the private housing sector

- Connection HAs, society, market, and government unbalance
- Inadequate governance .
- Self-regulation did not work properly
- At the same time: desire to develop private sector (a.o. Stef Blok)

## Back to core tasks (Housing Act 2015)

- Income limits for access (EU)
- Income dependent allocation
- Income dependent rent increase →
- Landlord levy
- Governance reforms
- SGEI/non-SGEI separation



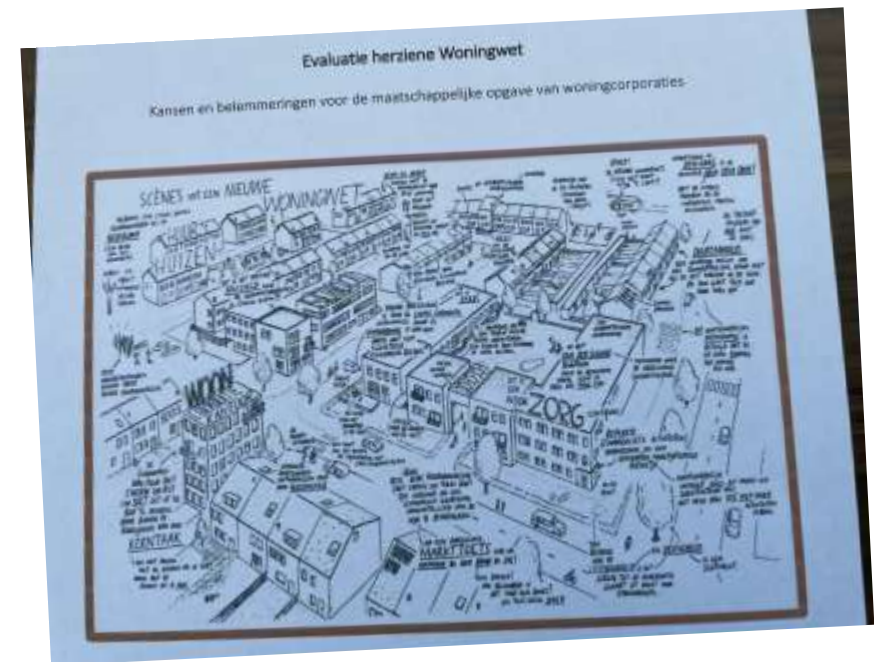
Market preference;  
Less construction, maintenance,  
improvement; Segregation; issues  
middle income households;  
concentration poverty

# Establishment Housing Association Authority

- Establishment Housing Association Authority 2015
- HAA supervises
  - Legality, governance, and integrity
  - Financial continuity, oversight financial instruments for public good
  - Solvency and liquidity, quality of financial risk management,
  - Financial management, overcompensation state aid

# 2018 - 2022 : Evaluation Housing act

- **Commission-Van Bochove:**
  - Housing Act not attuned to local realities
  - Municipalities, tenants, and HAs more room for local policy
  - Oversight HAA based on trust instead of institutionalised distrust
  - Abolish the landlord levy in exchange for performance agreements
- **New Housing Act in 2022**



# 2022 – now: A return of publicly guided housing

- Housing crisis
- Reappreciation of Housing Associations
- (Public) housing policy back on the political agenda
- Market could not provide (affordable) housing needs
- HAs (one of the) solutions to the problem
- 2024: National Housing agreements between government, market, and HAs
- 2026: Act Strengthening Housing Management + Role HAs middle income housing?



# National Sustainability Performance Agreements

# Brief overview

- **2020**  
Mismatch between tasks and available resources  
→ Significant funding gaps
- **2022**  
National Performance Agreements (2022–2030)  
→ Abolition of the landlord levy  
→ Tasks become financially feasible
- **2023**  
Update of the National Performance Agreements  
→ Financial shortfall due to rising interest rates and construction costs  
→ Large disparities between and within regions  
→ No sustainable performance model
- **2024**  
Revision of the National Performance Agreements (2025–2034)  
→ Framework introduced for long-term housing continuity  
→ Further development of solidarity and project-based support
- **2026**  
Update calculations of the National Performance Agreements  
→ Higher interest rates and rising maintenance costs  
→ €19.4 billion funding gap, still unresolved

# National Performance Agreements 2022-2030

Comprehensive agreement package with the housing association sector, including:

## **Availability**

- 250,000 social rental homes
- 50,000 mid-market rental homes (non-DAEB)

## **Sustainability**

- 450,000 homes to become gas-free by 2030
- No homes with energy labels E, F or G by 2028 (250,000 homes)

## **Affordability**

- Rent reduction in 2023
- In 2023, 2024, 2025: rent growth = wage growth (CAO) minus 0.5 percentage points
- Thereafter: indexed to inflation

## **Livability**

- Investments in housing quality
- Accelerated delivery of 50,000 clustered housing units

# Revision NPA 2025–2034

- New construction targets made more realistic:
  - Gradual increase to
    - 30,000 social homes annually from 2029
    - 5,000 mid-market homes annually from 2029
- **Sustainability strategy adjusted**
  - focus on reducing heat demand
  - Gas free target of 2030 extended to 2035
- Rent policy: → 2025: 4.5% increase (instead of 6.2%)
  - From 2026: based on rolling 3-year average inflation
- Introduction of a financial framework to assess feasibility

# Sustainability Agreements with Housing Ministry

## 2025 – 2035 targets

- 450.000 dwellings to receive sustainable heating alternative, other than natural gas
- The average heat demand of the social housing stock is to be reduced from 108 kWh/m<sup>2</sup> to 94 kWh/m<sup>2</sup> in 2030 and 87 kWh/m<sup>2</sup> before end of 2034.
- No more EFG-labels before end of 2028.

## Expected impact

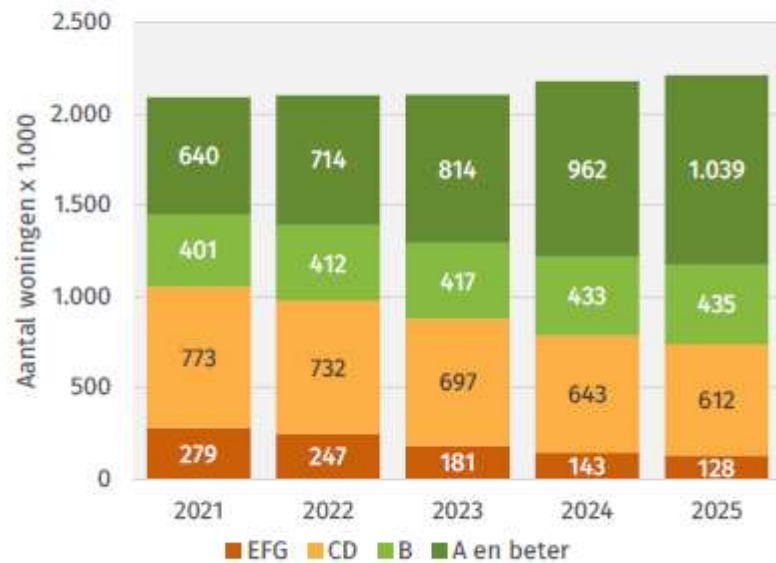
- By 2035 79% to 85% of dwellings are ready for a sustainable, low(er) temperature, heating alternative
- Renovation of the worst performing houses results in energy savings worth €350 to €550 annually, but on average expected savings could be lower, due to e.g. rebound effect

# What the Dutch social housing sector has already achieved

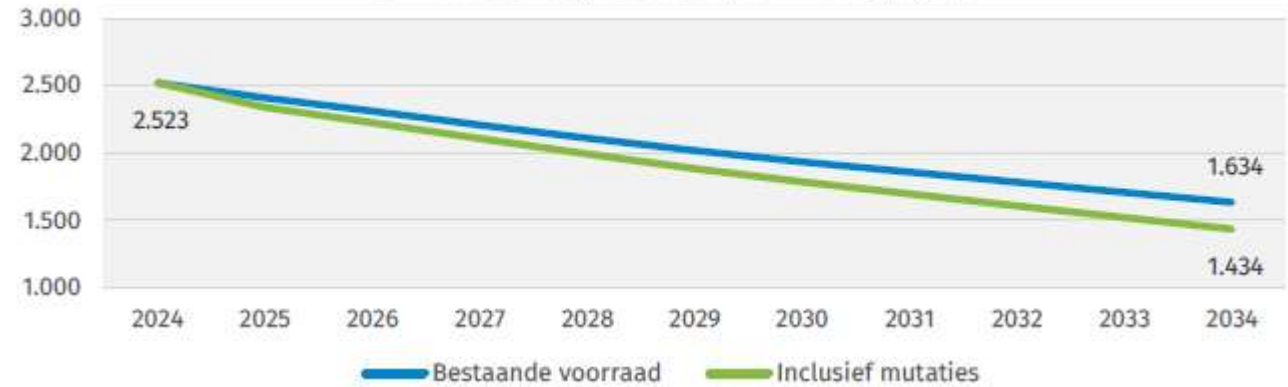
- 47% of social rental dwellings, or 1 million units, have energy label A or better
- Over 337,000 homes have been disconnected from the natural gas grid and are either connected to district heating or all-electric.
- Average tenant energy bills are €635 per year lower as a direct result of energy renovation
- Investments contribute simultaneously to emission reductions, energy security, and energy poverty alleviation
- These results show that large-scale decarbonisation of existing housing stock is feasible — provided the right policy conditions are in place.

# Development insulation and decarbonisation

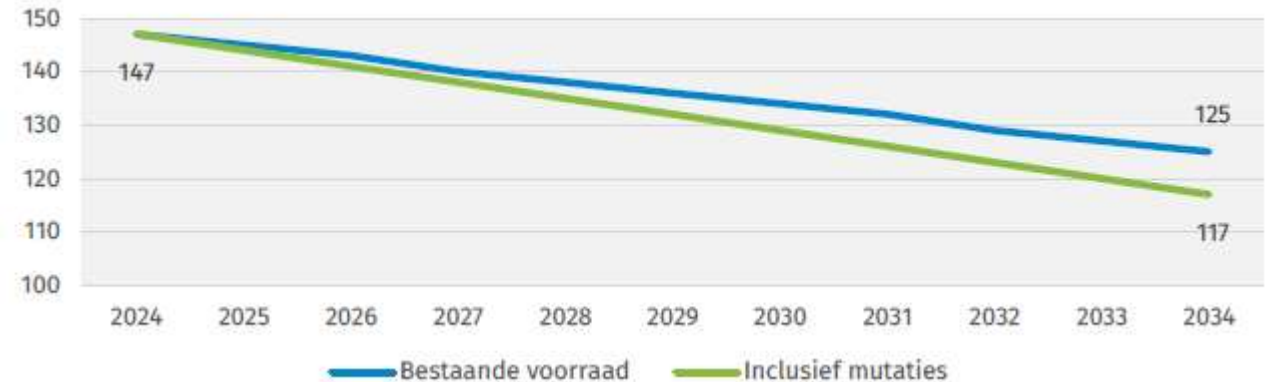
De voorraad EFG-labels is de afgelopen vijf jaar meer dan gehalveerd



Gemiddelde CO<sub>2</sub>-uitstoot per VHE (kg per jaar)



Gemiddelde energierekening per VHE (€ per maand)



# Financial model and goals under pressure

- Targets for decarbonization and insulation under (heavy) pressure.
- Limited possibility to recover investment through rent:
  - Rent cap levels: Max ~€900 rent, and in some cases max ~€700
  - No rental increase for insulation measures and no direct subsidies available
  - Max rental increase for energy efficient equipment is just below 50% of expected energy savings, which isn't sufficient to cover the investment.
- Increasing construction, renovation, and maintenance costs.
- Growing debt portfolios and interest burdens.
- Result:
  - Overall investment gap of 20 billion euros → Agreements for decarbonisation, housing supply, affordability, and housing quality in danger
  - +- 163.000 homes can not be decarbonised
    - Could be more depending on prioritisation if investment capacity does not improve (housing shortage prioritizes new construction)

# Key challenges

- **Energy infrastructure and district heating lags behind policy ambition**
  - District heating networks are essential for a balanced energy system, reducing electricity grid congestion and supporting the integration of renewable heat.
  - However, rollout is slowing because:
    - Societal benefits are not reflected in affordable end-user tariffs
    - Investment risks are insufficiently mitigated
    - Local authorities lack the financial backing to exercise their new planning powers effectively
- **Over-reliance on energy labels risks inefficient investments (EPBD IV)**
  - While EPBD IV provides important direction, a generic focus on energy labels — such as uniform C/D minimum standards (coalition plans in the Netherlands, but also in line with EPBD strategy) — risks misallocating scarce investment capital.
  - From practice we see that:
    - Targeting actual heat demand and insulation levels, aligned with the chosen heat source, delivers more CO<sub>2</sub> reduction per euro
    - Targets based on averages across portfolio's (e.g. average energy label B, rather than minimum energy label C) offer more room for cost effective renovation.
    - Label-based thresholds can delay action in high-consumption homes of low build-quality with good labels
    - They may prioritise buildings that are already structurally sound, rather than those with the greatest climate and social impact
  - Effective implementation of EPBD IV therefore requires flexibility, outcome-based indicators, and explicit safeguards against lock-in and stranded investments

# Need for structural improvement investment capacity

- **Social Climate Fund and national subsidy forms welcome but not enough**
  - Incidental in nature
  - Often used for income support instead of decarbonisation
  - SHAs do not have access to subsidies for insulation while homeowners or private landlords/commercial investors do
- **Better to improve fiscal climate for SHAs:**
  - Eliminate or alleviate corporate income tax (VPB and/or ATAD)
  - Implementation new state aid rules
    - Merging of SGEI and part non-SGEI
  - 0,5% extra rental increase per year from 2028
    - Can be compensated with rental allowance

**15:40-15:50 - Alfred van 't Hof (Haag Wonen) area**  
**Key information about the project we will be visiting**



**The Hague, Netherlands**  
13th - 15th May 2026



National Housing  
Maintenance Forum

# NHMF Study Tour 2026

# Welkom!

The Hague, Netherlands  
13th - 15th May 2026

**10:00 – 10:30 Boris Minkes City of The Hague**  
**The energy transition in The Hague**



**The Hague, Netherlands**  
13th - 15th May 2026



Den Haag

# Energy transition in The Hague

Our policies, projects and partners



# Introductions



Boris Minkes Projectmanager Energy transition  
Municipality of The Hague  
[Boris.minkes@denhaag.nl](mailto:Boris.minkes@denhaag.nl)

# Table of contents

1. The Energy Transition in the Netherlands
2. The Role of the Municipality of The Hague
3. Collaboration with Partners
4. The Municipal Heat Company
5. Key Challenges
6. Conclusion and Discussion



# The Energy Transition in the Netherlands

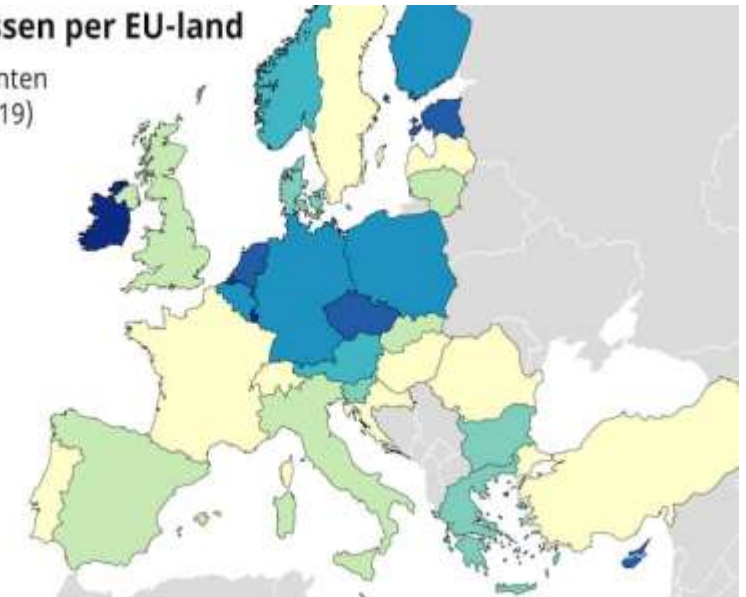
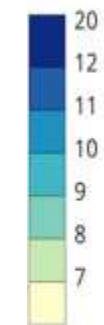
## National CO<sub>2</sub> Reduction Goals:

- 55% greenhouse gas reduction by 2030
- Climate neutrality by 2050
- 90% emissions reduction by 2040
- **Result in 2050:** 8 million buildings and homes free from natural gas
- Carbon removal of 20–25 megatonnes per year between 2040–2050 .
- CO<sub>2</sub>-free electricity sector by 2035



### Broeikasgassen per EU-land

in CO<sub>2</sub>-equivalenten per inwoner (2019)



Bron: EEA

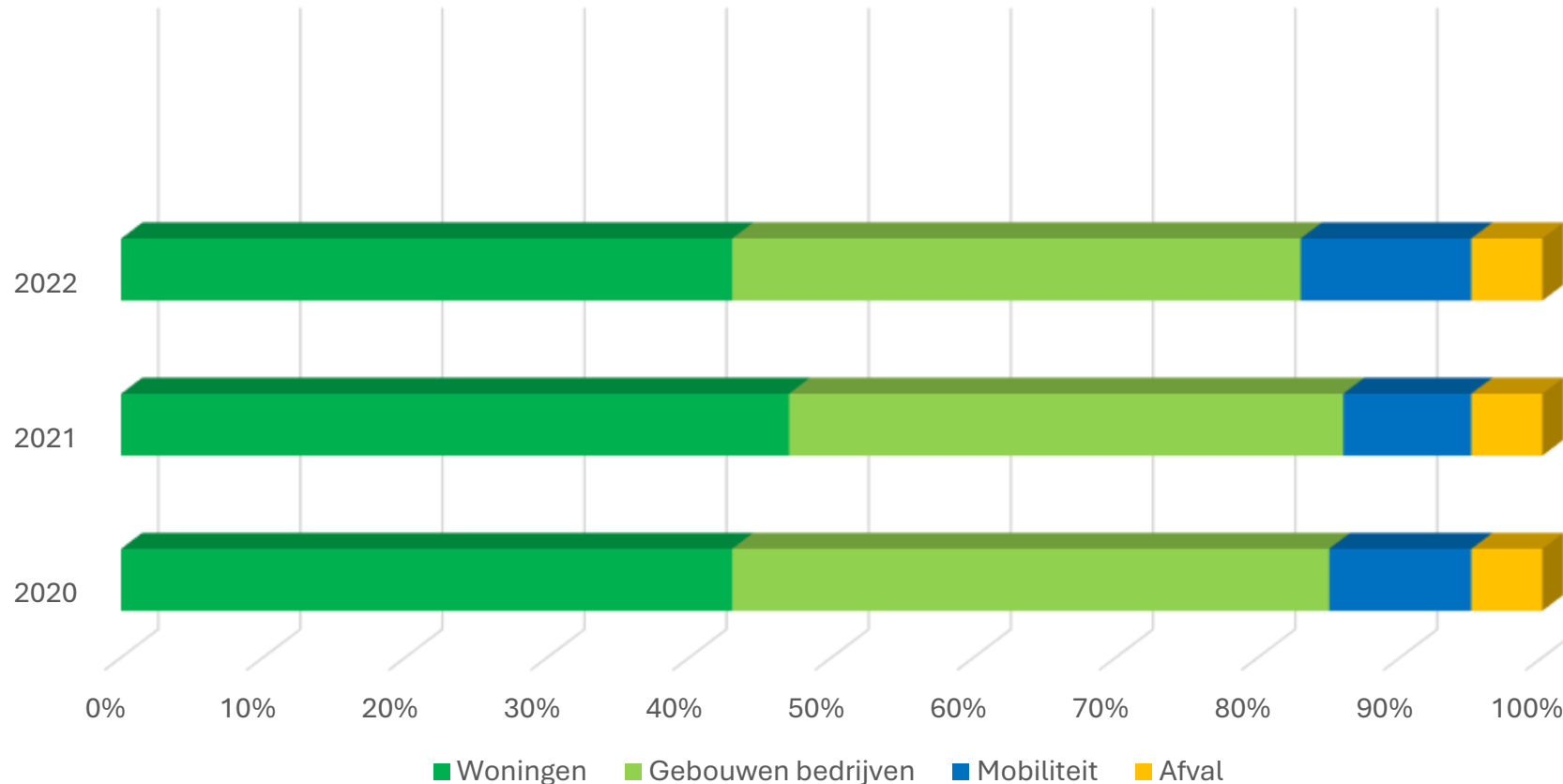
# Why focus on the built environment?

Greenhouse gas emissions per sector  
in megatons of CO2

Sector	1990	2024*	Raming 2030
<b>Reductie nationale broeikasgasemissies vanaf 1990 (procent)</b>	-	36	50
<b>Totaal</b>	228	145	114
<b>Elektriciteit</b>	39,6	23,1	12,1
<b>Industrie</b>	87,0	47,4 <sup>b</sup>	37,2
<b>Gebouwde omgeving</b>	29,8	17,2	15,5
<b>Mobiliteit</b>	33,6	29,2	23,5
<b>Landbouw</b>	33,2	24,8	21,9
<b>Landgebruik</b>	4,42	3,1	4,1
<b>ESR-sectoren</b>	-	81,8	68,5
<b>Cumulatief ESR-sectoren 2021-2030</b>	-	-	800
<b>Methaanemissies</b>	36,5	18,0	15,7

# Why focus on the built environment?

In 2022, approximately 80% of the CO<sub>2</sub> emissions within the city limits of The Hague were caused by heat and energy use in homes and buildings. This is because we still mostly rely on natural gas for this purpose.

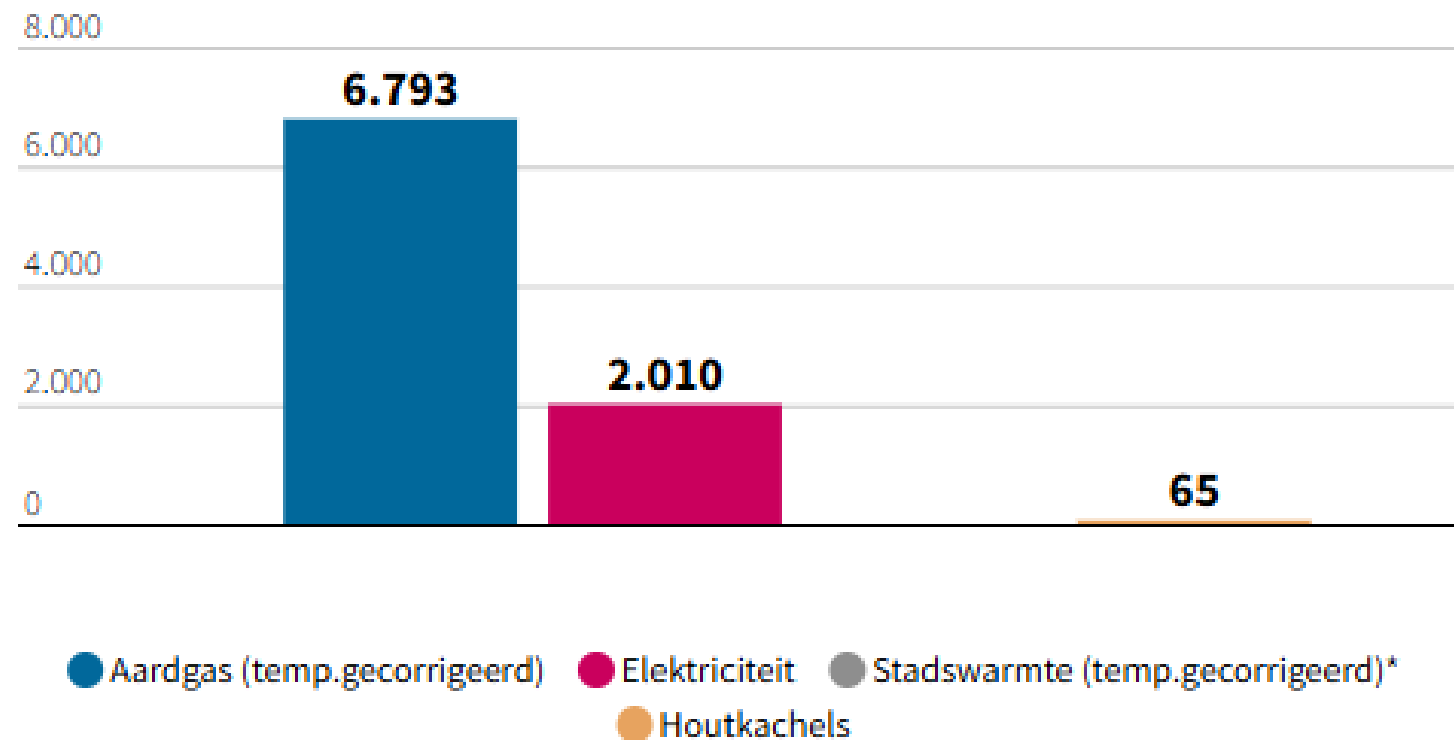


# Why focus on the built environment?

## Energy consumption houses in Terajoule (The Hague)

### Energieverbruik woningen

Den Haag, TJ



Bron: regionale klimaatmonitor

Bron: meerdere bronnen | 2024

# The Role of the Municipality of The Hague – how will we make it happen?

We have local ambitions and policy instruments to make the transition happen:

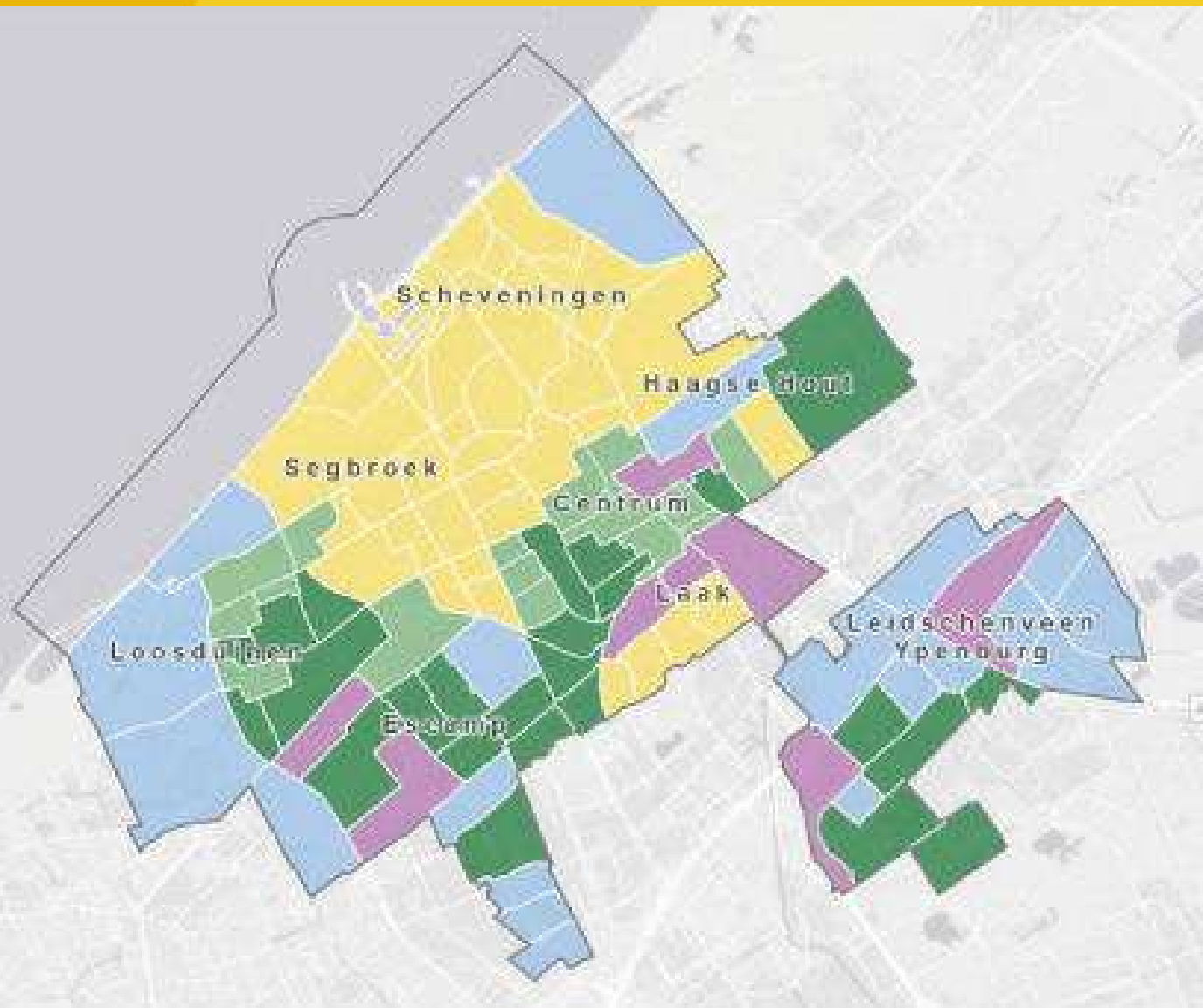
- Aanwijsbevoegdheid
- The Hague Climate Act
- Area based implementations in neighbourhoods

**The Hague translates national climate goals into local action by:**






- adopting an accelerated local climate-neutral target (2030),
- converting national objectives into concrete local climate deals,
- implementing them through neighbourhood-level programmes,
- embedding democratic oversight and citizen participation



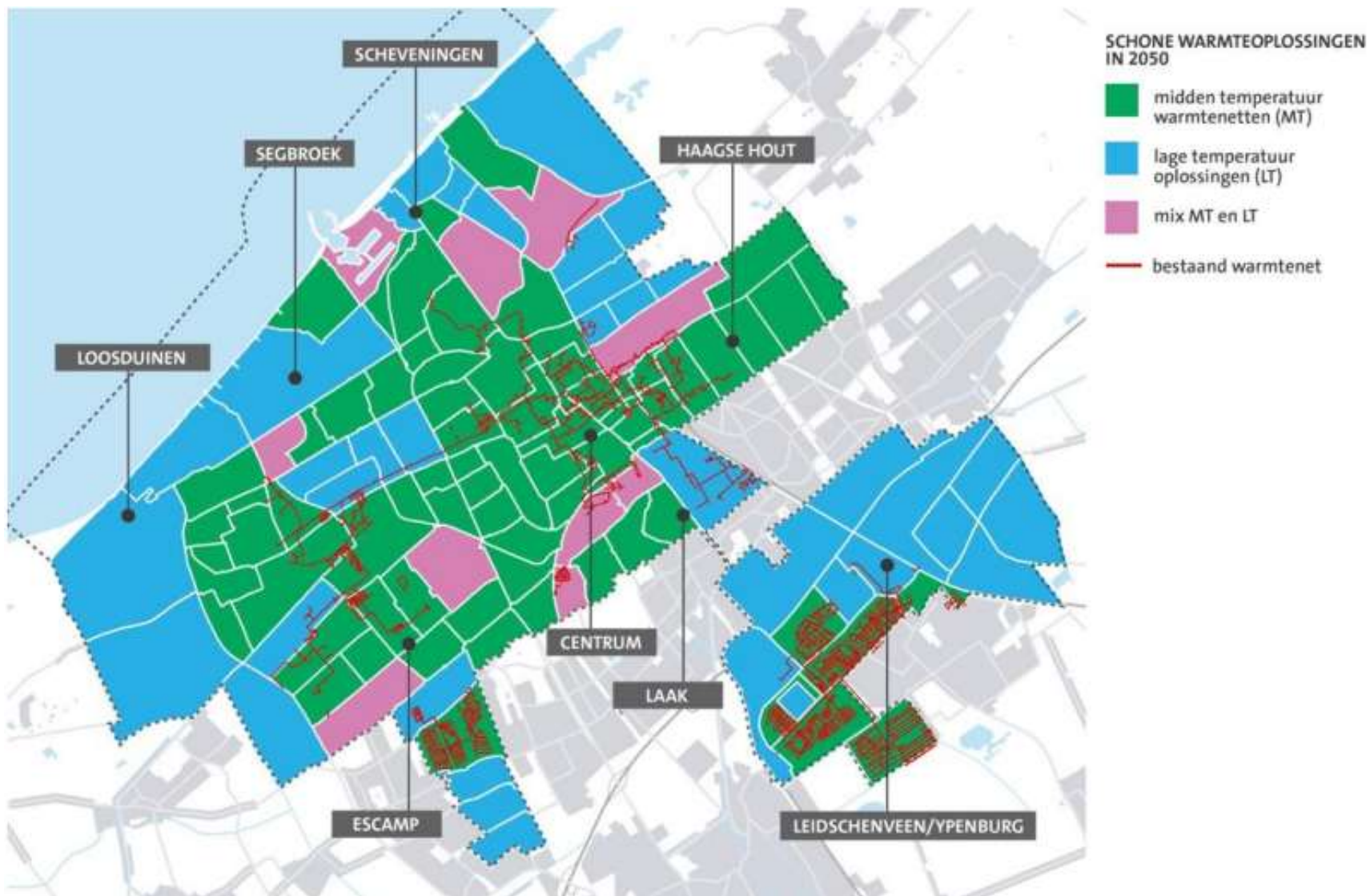
# What is a warmteprogramma or "Heat program"?



## Schone warmteopties in 2030

-  (Hybride) warmtepompbuurten
-  Warmtenetbuurten voor 2030
-  Warmtenetbuurten na 2030
-  Mix van warmtepompen en warmtenetten
-  Warmteoptie nog onduidelijk. Hybride warmtepomp mogelijk

# What is a warmteprogramma or "Heat program"?



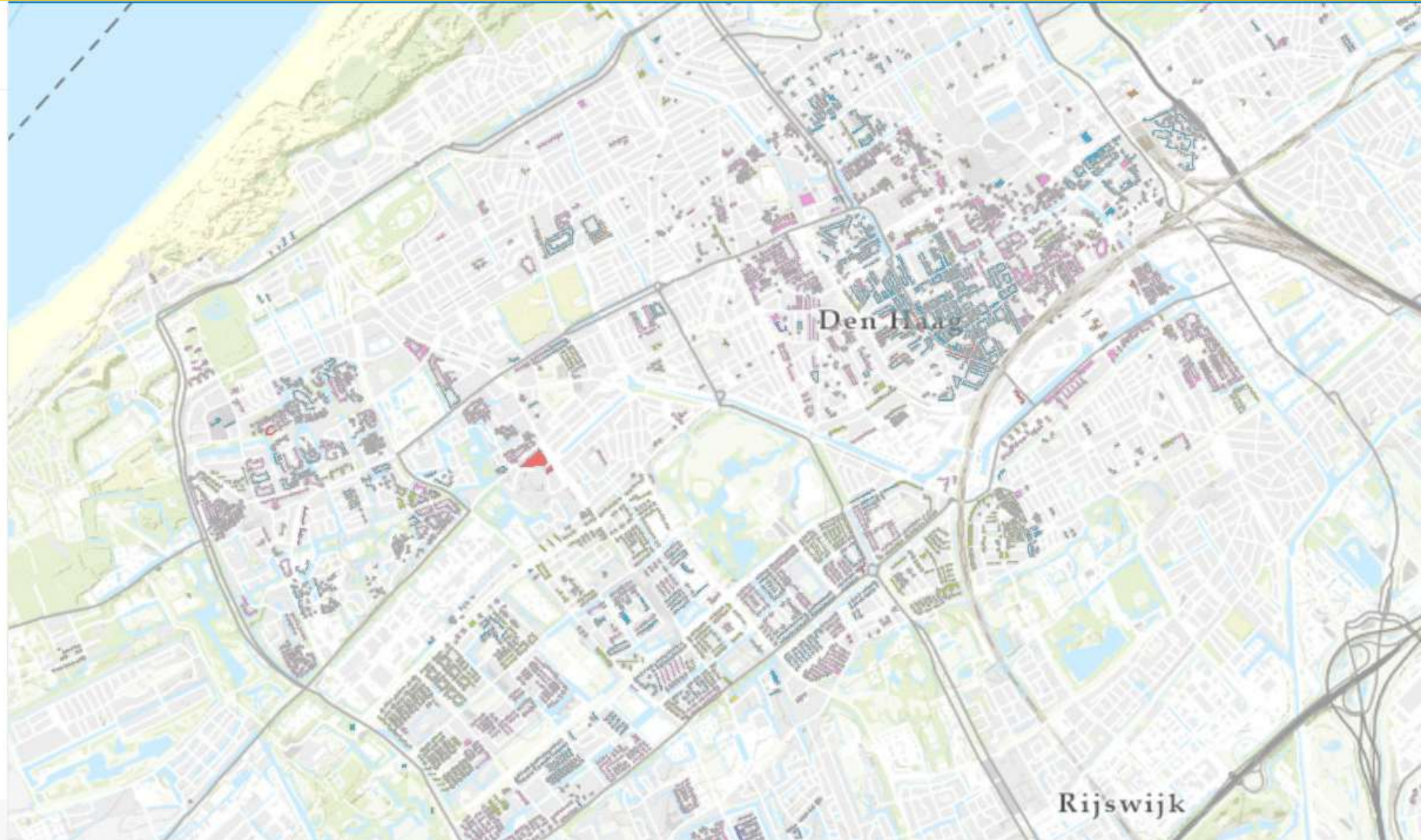
# The role of housing associations and the Heat program

Legenda

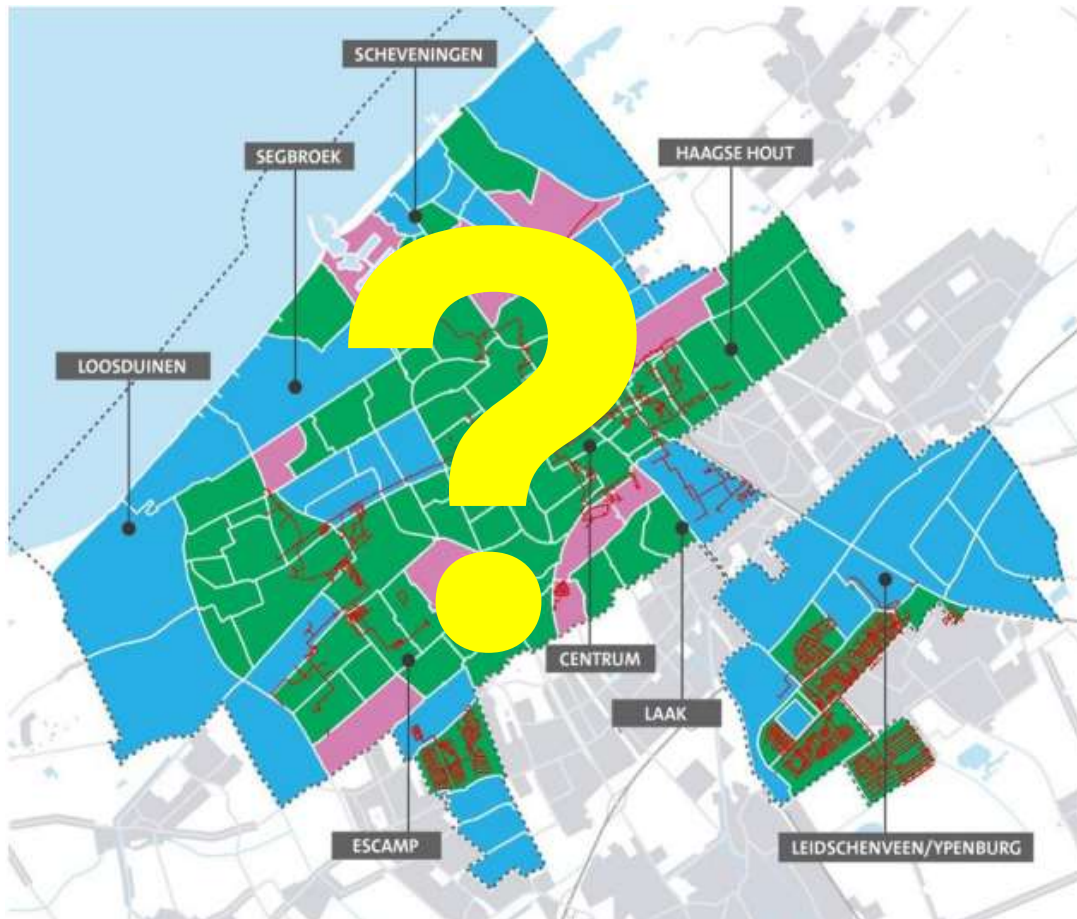


## Corporatiebezit

-  Arcade Wonen
-  Haag Wonen
-  Hof Wonen
-  Mooiland
-  Omnia Wonen
-  Rijswijk Wonen
-  Staedion
-  Stichting DUWO
-  Vidomes
-  WoonInvest
-  Woonzorg Nederland



# The role of housing associations and the Heat program



## SCHONE WARMTEOPLOSSINGEN IN 2050

- midden temperatuur warmtenetten (MT)
- lage temperatuur oplossingen (LT)
- mix MT en LT
- bestaand warmtenet



# Collaboration with partners – Public Heat Company

## The Hague Heat Company



## Betaalbare stadsverwarming: Den Haag werkt aan publiek warmtebedrijf

 Luister

Den Haag moet uiterlijk in 2050 van het aardgas af. In drukke wijken is stadsverwarming de beste oplossing. Maar de warmte moet ook betaalbaar zijn. Een publiek warmtebedrijf geeft hiervoor de beste kansen.



# Why do we choose a public heat company?

Private heat companies have been taking the lead so far, but...They are not succeeding. Why?

- 1. Insufficient business case**
- 2. Unmanageable risks**
- 3. Lack of public trust**
- 4. Complex public–private coordination**
- 5. Scaling problem**
- 6. Changing role of government**



# Why do we choose a public heat company?

How will a public heating company succeed?

**A public heat company can succeed because it treats heat as public infrastructure, not as a market commodity, aligning investment, risk, trust, and long-term planning with public goals.**

# Some key differences compared to a private heat company



# Key Challenges

- **Electricity grid congestion**
- **Space in the subsurface**
- **Affordability and cost distribution**
- **And much more!**



# Electricity grid congestion

Grid congestion throws a spanner in the works!

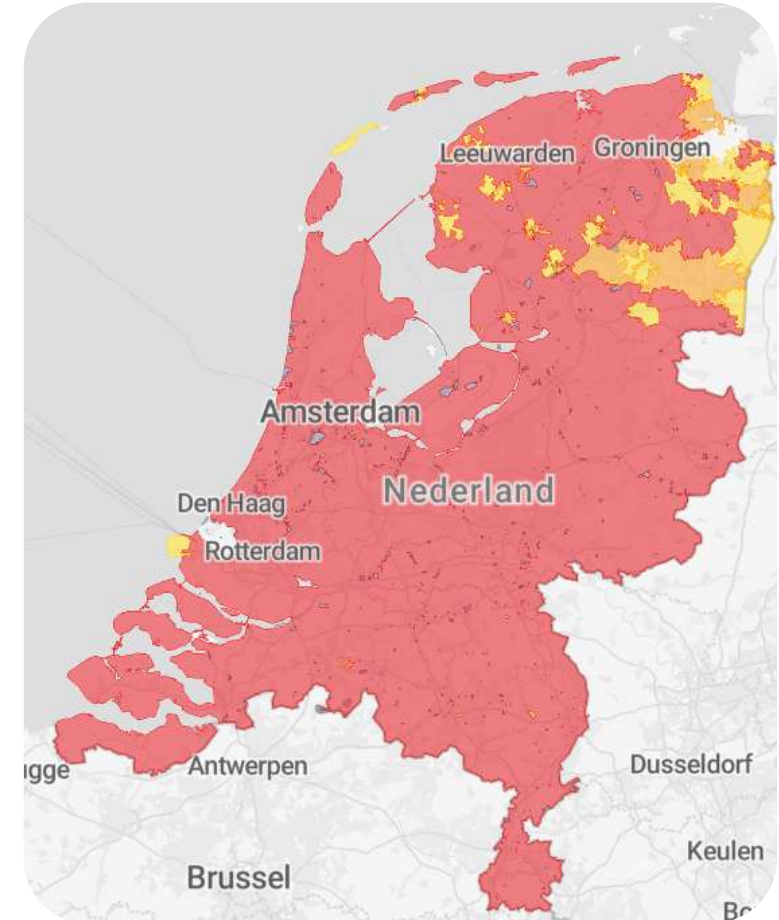


# The Challenge: Electricity Grid Congestion in The Hague

## Impacts:

- Housing and area development risk delay
- Businesses miss out on opportunities to grow or decarbonize
- Public buildings (schools, sport facilities) face electrification delays
- Collective heat systems (geothermal/aquathermal) stalled

The Hague's electricity demand is set to **rise by 60% by 2030**, putting unprecedented pressure on an already congested grid.



Source: Netbeheer Nederland (October 2025)

# The subsurface in The Hague is scarce



Source: Netbeheer Nederland (October 2025)

# Conclusions and key takeaways

- The energy transition is technically feasible but increasingly constrained by grid congestion
- Housing associations play a crucial role in combining affordability, sustainability, and liveability
- Net capacity limits require smarter choices, prioritisation, and phased implementation
- Focus in the coming years should be on:
  - Energy efficiency and insulation first
  - Collective solutions (district heating, shared systems) where possible
  - Smart demand management instead of full electrification everywhere
- Close collaboration between housing associations, municipalities, and grid operators is essential
- A realistic, step-by-step approach keeps the transition achievable and socially just



Den Haag

**Thank you!**

**10:30 – 10:50 Will Routh Chirpy Heat  
Energy/Retrofit in UK**



**The Hague, Netherlands**  
13th - 15th May 2026



# HEAT TRANSITION IN THE UK

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14 MAY 2026



Will Routh – Co-Founder and Director

# Introduction

**Established 2019 – the leading provider of independent heat network advice and support to non-profit heat network operators in the housing sector**

- Established and developed by people from housing and public sector
- No involvement or commercial interest in supply chain
- 150 clients – 25% of UK’s heat networks.
- Services - from the ‘plantroom to the boardroom’ – all aspect of heat networks, customers, specifications, training, technical etc.

**Vision:** A world where heat is affordable, reliable and low-carbon for all.

**Mission:** To deliver independent expertise and leading solutions that help the housing sector create simply better heat networks.



## Net Zero Policy

**UK is bound by the Climate Change Act 2008 to reach net zero emissions by 2050**

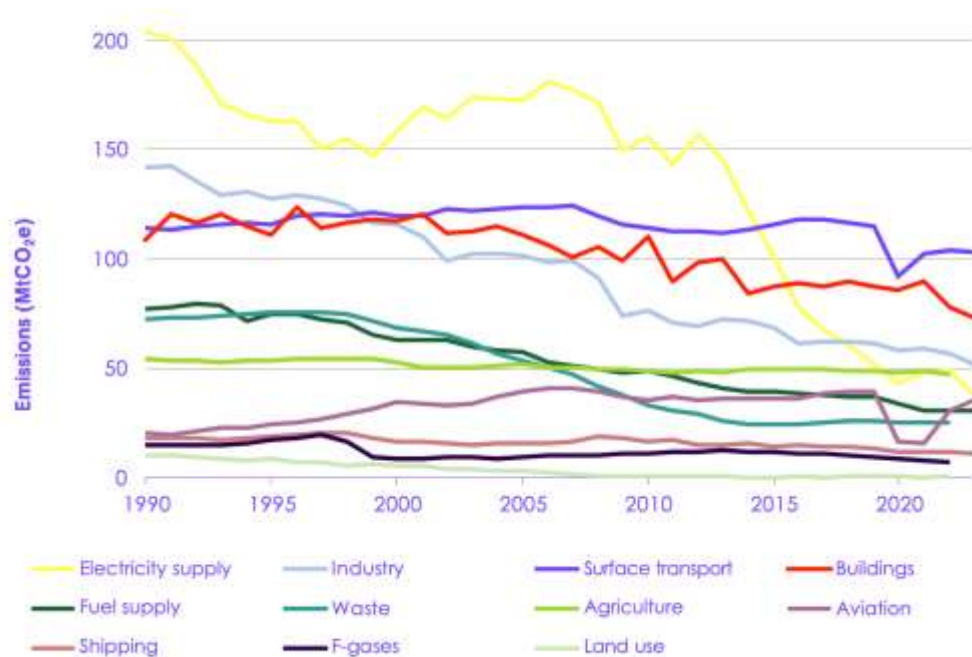


Climate Change Act 2008

- Requires the elimination of fossil fuels across the economy
- Heating accounts for about 1/3 of UK emissions
- 90+% of UK homes (23m properties!) use fossil fuels to heat their home
- All needs replacing in the next 24 years

# How are we doing? – sector emissions

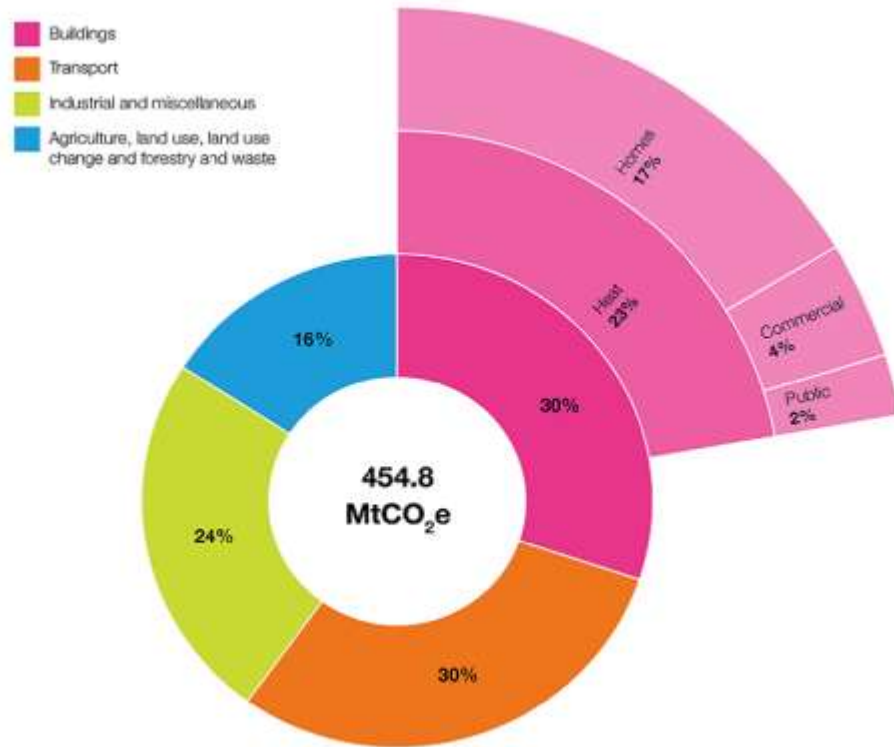
Figure 1.3 UK emissions by sector since 1990



Source: Department for Energy Security and Net Zero (DESNZ) (2024) *Provisional UK greenhouse gas emissions national statistics 2023*; DESNZ (2024) *Final UK greenhouse gas emissions national statistics: 1990 to 2022*.

- Grid electricity emissions – large reduction due to phasing out of coal for electricity generation and being replaced by renewables – wind and solar
- Buildings – some reductions in residential due to insulation programmes of last 15 years
- Other sectors flatlining - need to accelerate fast - including low-carbon heat
- Challenge for next carbon budgets - rapidly reduce gas, oil & petrol use
- Should be in a phase of delivery and large investment – still at policy stage

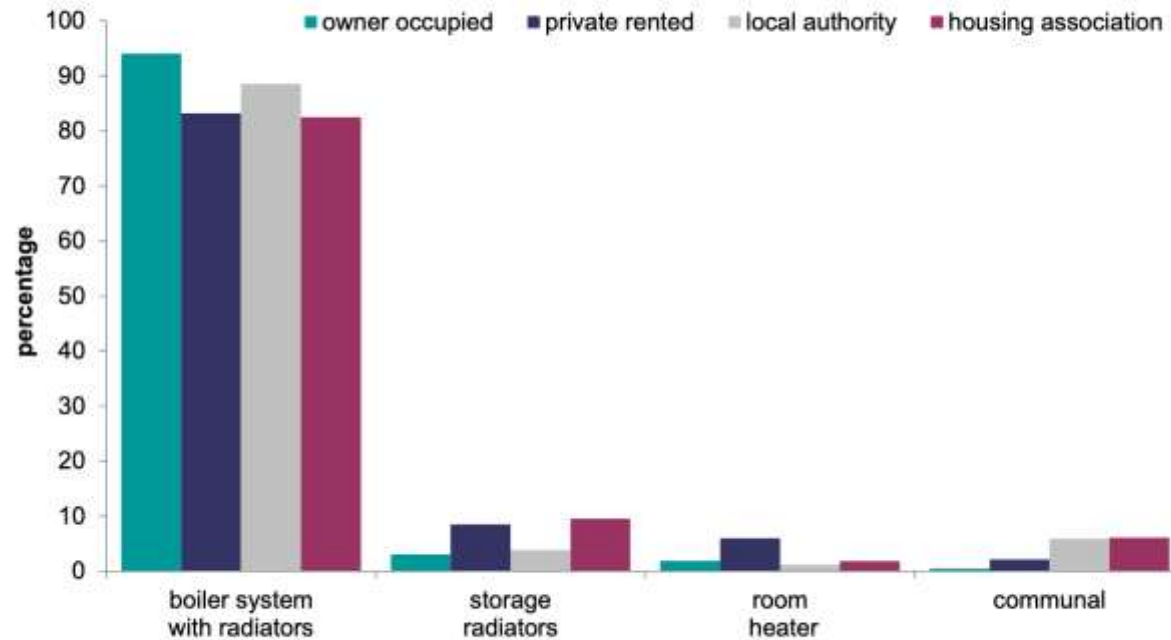
## Carbon emissions association with heating buildings



- 30 million buildings in the UK
- Responsible for 30% of our national emissions
- 79% buildings emissions result from heating and hot water
- Heating: 23% of all UK emissions

# How does the UK currently heat its homes?

Figure 2.1: Most common heating systems, by tenure, 2019

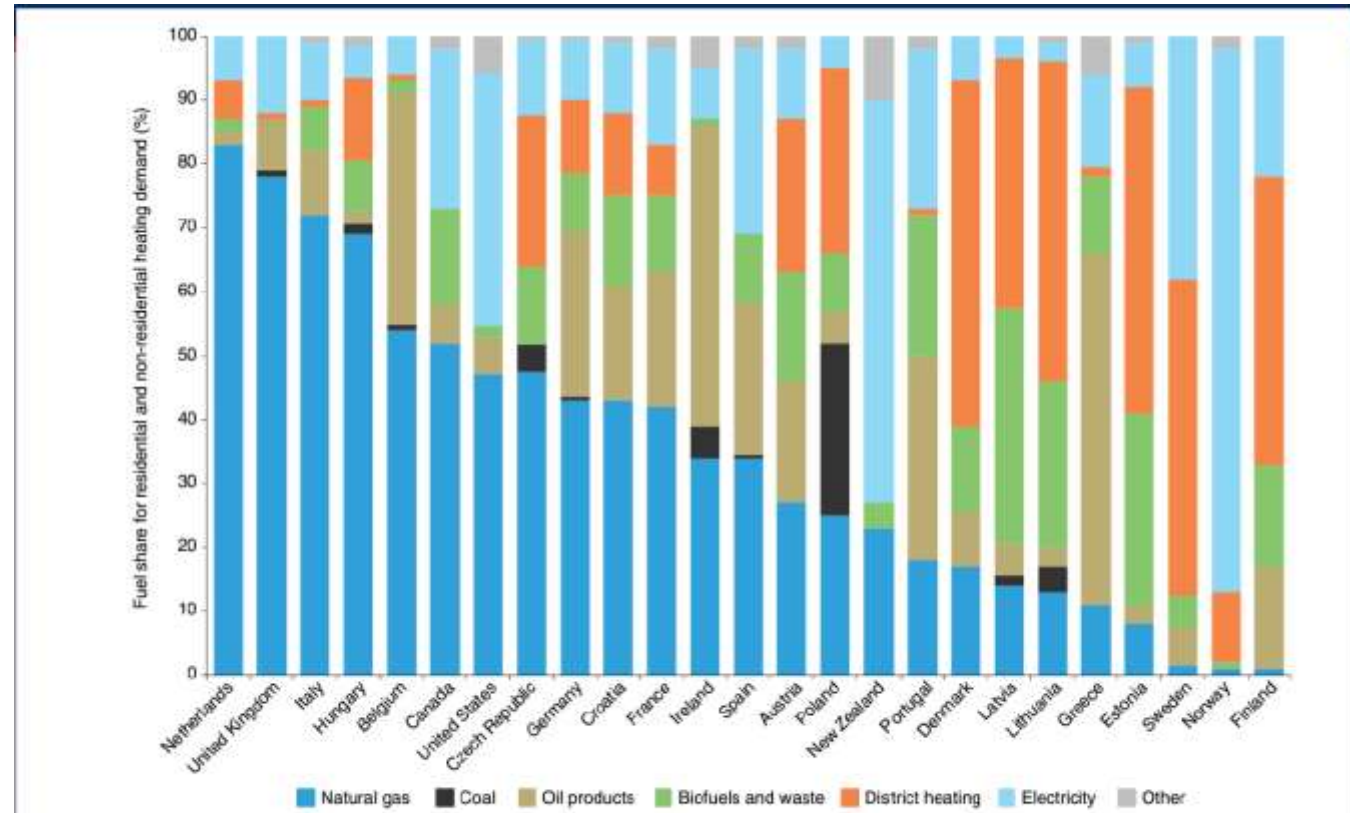


Base: all dwellings

Sources: English Housing Survey, dwelling sample

- 90% properties have individual gas boilers: 22 million properties
- 5% Electric storage radiators
- 3% Communal/District: 500k homes – mostly served by gas
- 2% room heaters

# How does Europe heat its homes?



**Fig. 1 | Fuel shares for residential and non-residential heating in selected countries.** For the United States, data are only for residential fuel shares. Other includes wind, solar, geothermal and peat. Figure adapted from ref. <sup>1</sup>, based on data obtained with permission of Vivid Economics and the Department for Business, Energy and Industrial Strategy.

# Heat decarbonisation – two main options

## 1. Heat Pumps

- Mostly air source
- Individual properties

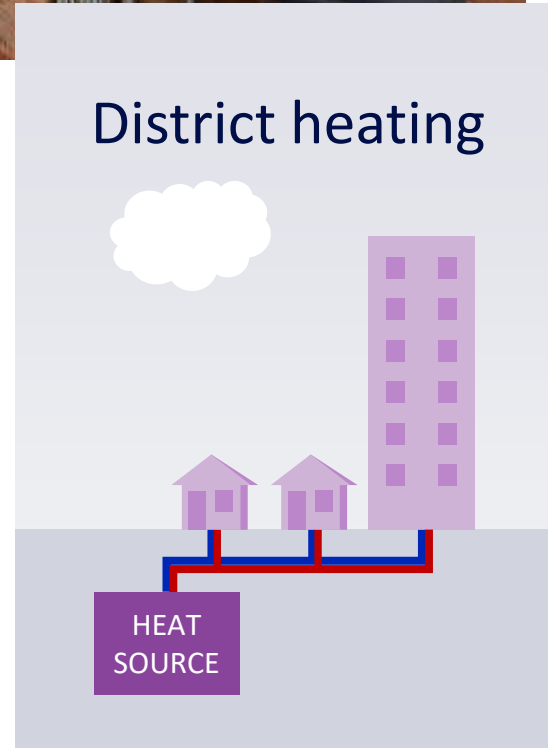


## 2. Heat Networks

- Waste heat and commercial scale heat pumps
- Dense urban areas - difficult to deploy individual heat pumps and access to waste heat

### Discounted

- Hydrogen & Green Gas: Not included in the Warm Homes Plan



## Heat Decarbonisation Progress



- **Heat Pumps:**

- Total installed: circa 450,000
- 125k/year in 2025 (27% YOY increase)
- Warm Homes Plan Target: 450k/year by 2030 – 33% YOY growth

- **Heat Networks**

- Current homes served: 500k (but most are gas and need decarbonising!)
- Target: 5m homes equivalent by 2050
- Estimate current new connections/year: 20-40k (not tracked)
- Required connections/year: 180k (600% growth on current levels)

# Heat networks in the UK

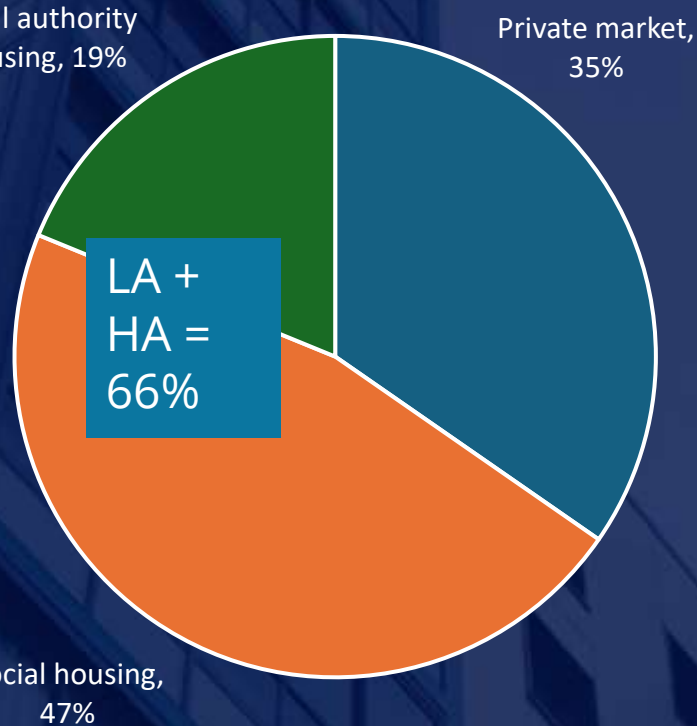
## 01 Where are we currently?

- 14,000 heat networks in the UK
- 3% of UK buildings currently on a heat network
- 500,000 customers live on a heat network
- Only ~2,000 networks are metered
- Around 2/3 are in social housing management

## 02 The future

- Low carbon heat networks listed in Government's Net Zero Strategy
- UK Carbon reduction heat demand targets:
  - 2035: 7%
  - 2050: 20% / 5 million customers
- Government funding (GHNF, HNES), regulation and zoning

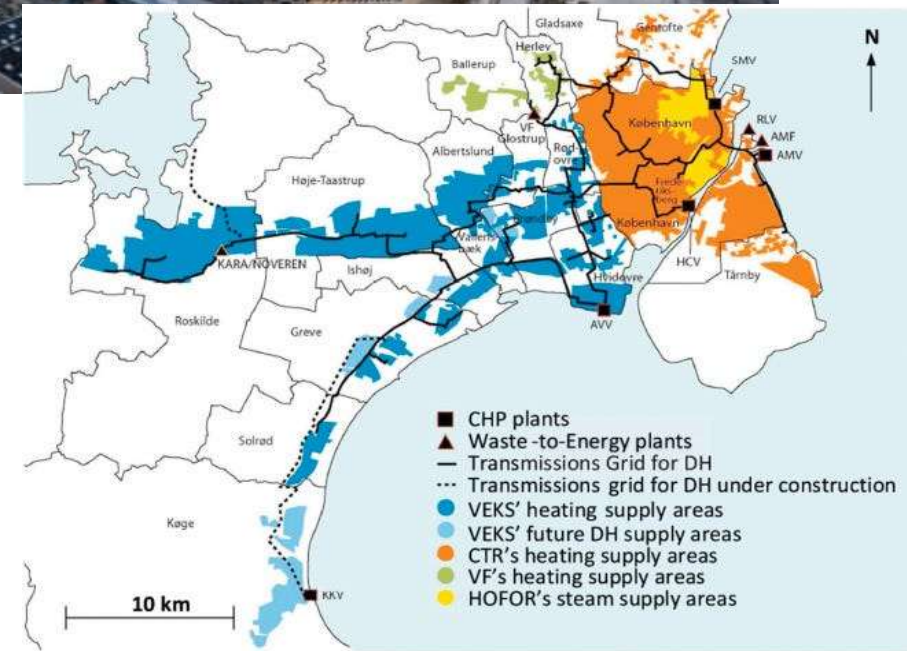
**The promise: low carbon, low cost, reliable heat**

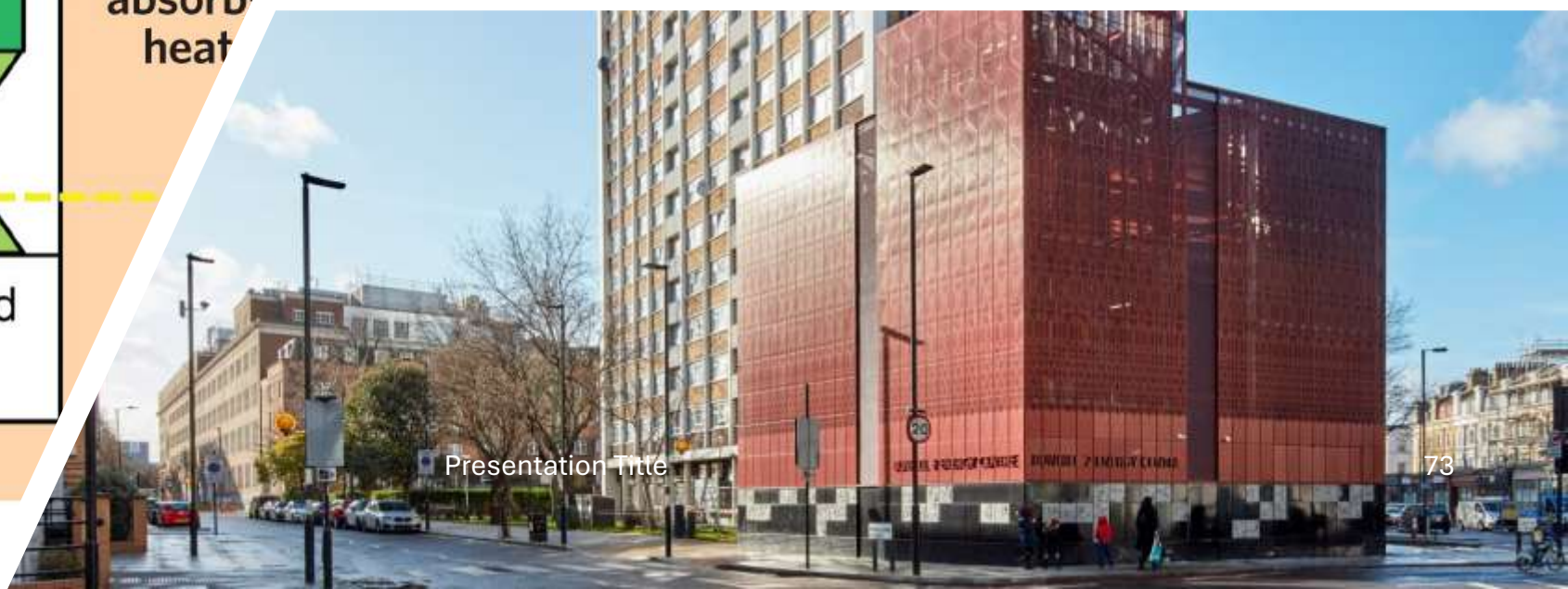
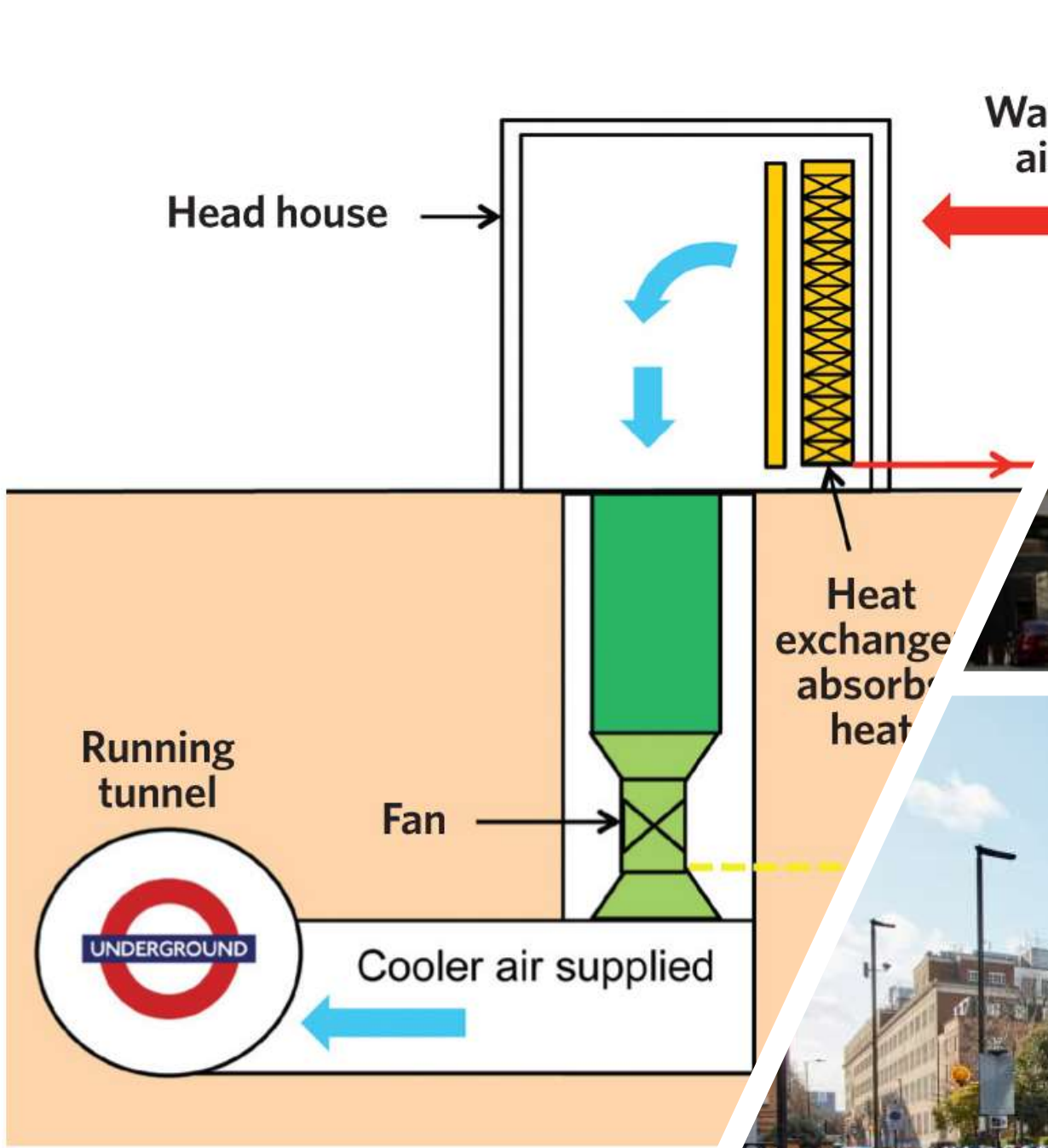


# The Vision – Stockholm/Copenhagen



Fjärrvärme i Storstockholm





## The reality

01 'From accidental energy suppliers to fully regulated energy suppliers'

02 Reactive management and costs

- Poorly designed, developed and delivered networks by supply chain
- Limited internal knowledge & experience
- Pick & mix of technologies and suppliers
- Financial losses and ongoing operational issues

Lambeth Council tenants fear eviction over unpaid heating bills

Tenants in Tunbridge Wells claim they are paying a 'hidden charge' for energy to landlord

But Town and Country Housing said the charge was for how much they used to their home

Residents are not certain of the cause of the problem, but as more issues occur in the winter months, they believe the communal boiler cannot withstand high levels of demand.

People are paying energy bills of £2,300 a month because they are stuck on controversial 'heat networks'

'Massive hardship': Tenants in Poplar charged four times national average for their heating



Presentation Title



# Full Heat Network Regulation



Heat Network  
Technical Assurance  
Scheme

Introduction to HNTAS Training

Fully Funded | Available Now



hntas

→ Enrol now

## Energy Act 2023

- To provide same level of customer protection in a new and growing utility market, particularly one with a natural monopoly and no consumer choice
- To support roll out of heat networks



# 01

## Customer Protection

- Mirror traditional utilities:
- Transparency
- Quality
- Pricing
- Vulnerability

# 02

## Technical Standards

- Performance standards and thresholds
- New networks - certification before authorisation
- 'Legacy' networks: 10-year Heat Network Improvement Plan
- 3<sup>rd</sup> party assessment and verification

# 03

## Zoning

- Support roll out of heat networks
- Lowest cost, lowest carbon solution
- National methodology, local coordination
- Mandated connections: new buildings, communal heating, commercial

## What policy is aiming to achieve

### 01 Address Legacy

- Address consumer protection especially in natural monopoly
- Formalise the market
- Pathway for improvement

### 02 Create a market

- Framework – heat zones, roles in market
- Investment – encourage through clarity, certainty and timetable for growth

# Challenges

1. Regulation is aiming to deliver **multiple policy outcomes** – consumer protection and investment.
  - Can we protect consumers and generate private sector investment at same time? Could they undermine each other:
    - Consumer Protection – higher investment costs
    - Private investment – higher consumer costs
2. **Timescales:** took Sweden (10m people) 35 years to achieve - UK (67m people) trying to achieve in 25 years
3. **Skills & Knowledge:** currently about 5,000 people work in UK heat network sector - need at least 50,000
4. **Technical (& disruption):** installing pipework into busy & crowded cities (people and services). Connection to waste heat.
5. **Affordability:** To consumer and social landlords. Who Pays? Electricity market rebalancing.
6. **Operational:** commercial agreements and connection to social housing? Alignment with landlord responsibilities
7. **Political Risk:** removes individual choice and (potentially) increases cost – could become anti net zero target

# Bristol: Zoning Go Early

## Delivery model:

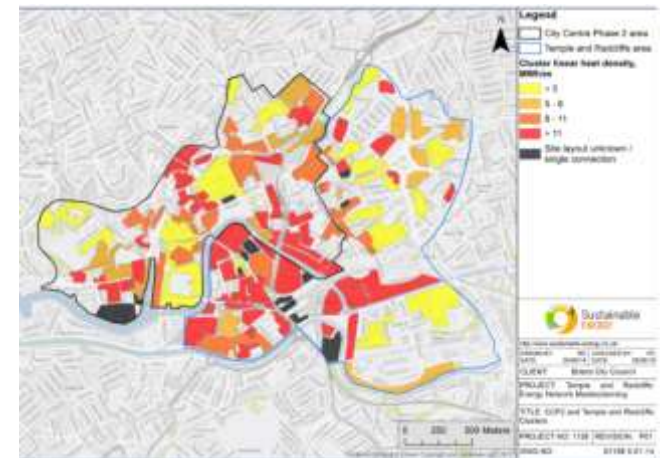
- Bristol City Leap: Public-Private Partnership Joint Venture
- Bristol City Council and Vattenfall (heat network developer and operator)
- Heat Network Zone – 1<sup>st</sup> out for consultation in April (1<sup>st</sup> in UK)
- Expected to create 1000 new jobs

## Heat Sources:

- Existing communal boilers
- Water Source Heat Pump (harbour)
- Data Centre waste heat (University)
- EfW & Factory waste heat (future)

## Size:

- Current: 30 buildings (municipal and commercial buildings), 3500 residential properties, '13,000 homes equivalent'
- Vision: over half of all Bristolians living, working and learning in the city will be kept warm by the Bristol heat network by 2050. 68,000+ buildings



# Cardiff: Energy From Waste

## Delivery model:

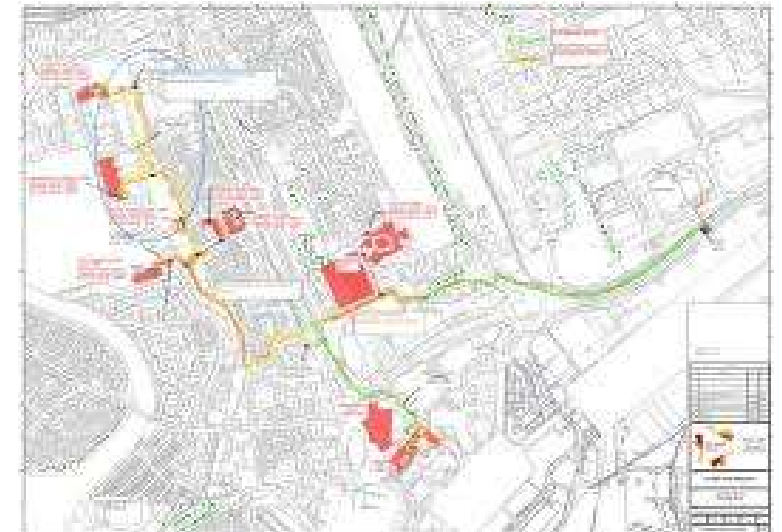
- Subsidiary company of Cardiff Council
- Contracts delivery partners/service providers- Hemiko
- UK government funding and low-cost loan from Welsh Government
- Long term contract for offtake of waste heat

## Heat Sources:

- Energy from Waste (EfW) Plant

## Size:

- Phase 1: Cardiff Bay
  - 11 Public buildings (Senedd, Council Offices, College) and some flats
  - 3,700 homes equivalent
- Phase 2: City Centre large expansion potential – commercial and additional flats



# Leeds: EfW and public buildings

## Delivery model:

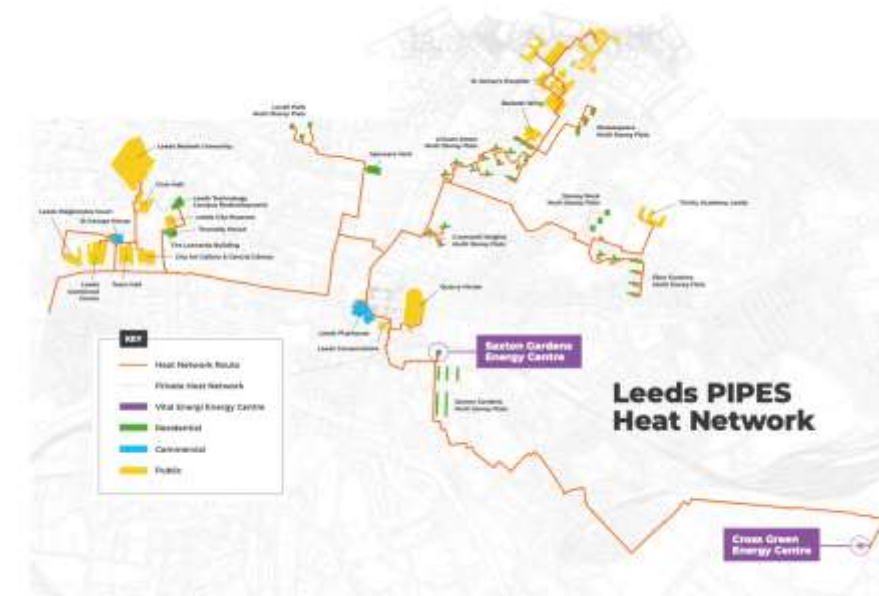
- Council owned Special Purpose Vehicle- Leeds Pipes in partnership with Vital Energy
- UK government funding – loans and grants
- 430 jobs

## Heat Sources:

- Recycling and Energy Recovery Facility (RERF)

## Size:

- 30km of pipes, 4,100 homes, 30 major public and commercial buildings (e.g. Town Hall, Hospital)
- Next phase: 28 new buildings (residential and commercial), 8,000 new customers



Thank you!



Will Routh  
Director & Co-Founder  
[will.routh@chirpyheat.com](mailto:will.routh@chirpyheat.com)

[www.chirpyheat.com](http://www.chirpyheat.com)

<https://www.linkedin.com/company/chirpy-heat/>

10:50 – 11.05



**The Hague, Netherlands**  
13th - 15th May 2026

## 11.05 – 11.15 Coffee Break



The Hague, Netherlands  
13th - 15th May 2026

**11.15 – 11.30 Leontine Diemel Tromp (*City of The Hague*)  
History of public housing in The Netherlands and The Hague)**



**The Hague, Netherlands**  
13th - 15th May 2026



Den Haag

# Short history of The Hague

Leontine Diemel, 14 May 2026



# Introduction The Hague

## HISTORY

- The Netherlands and The Hague (short film)
  - Political centre
  - Sandy soil and on peat soil
  - Scheveningen as a seaside place, spa
  - Industrialisation, railroad, concerns about public health
- Housing Act: Woningwet 1901

## TODAY

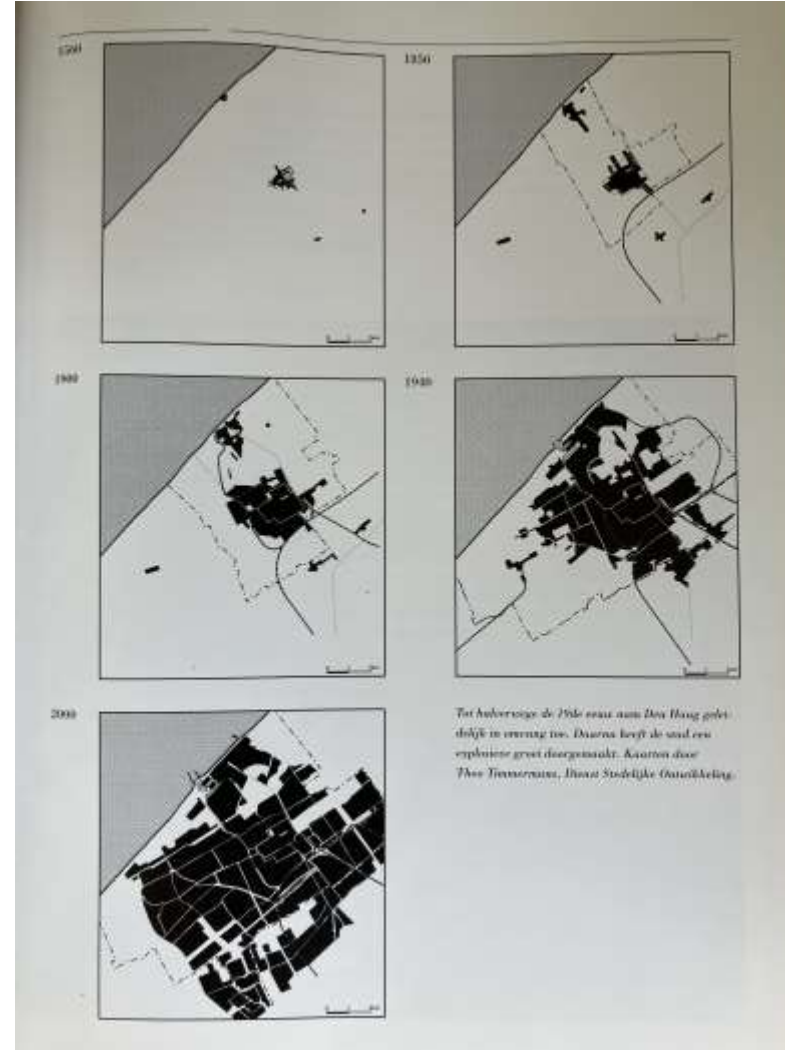
- The Hague in 2025
- Strategic housing policy: Woonvisie Den Haag 2040



# The Netherlands and The Hague



- 1560
- 1850
- 1900
- 1940
- 2000



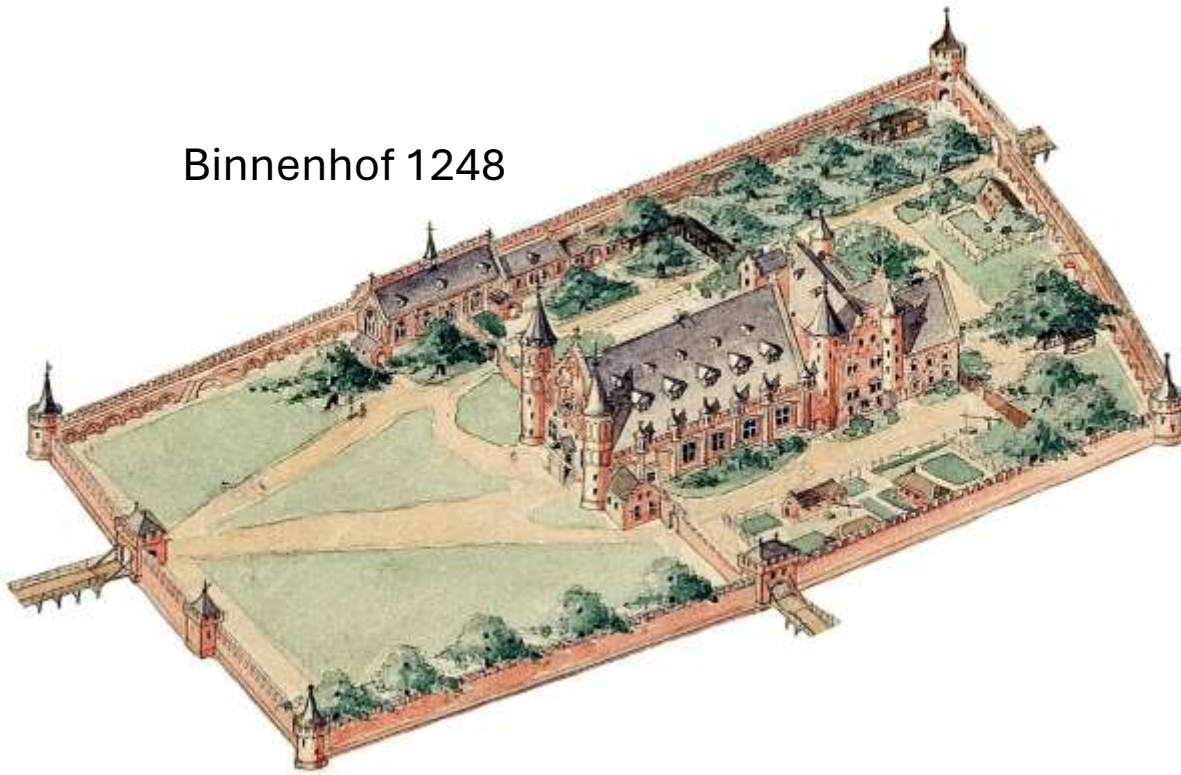
Year	Inhabitants (x1000)
1850	72
1900	206
1950	559
2000	441*

\*reorganisation municipalities.  
Source:  
bevolkingsatlas  
NL.

Haags DNA: Laak zoals het was (English subtitles)

# Political centre

Binnenhof 1248



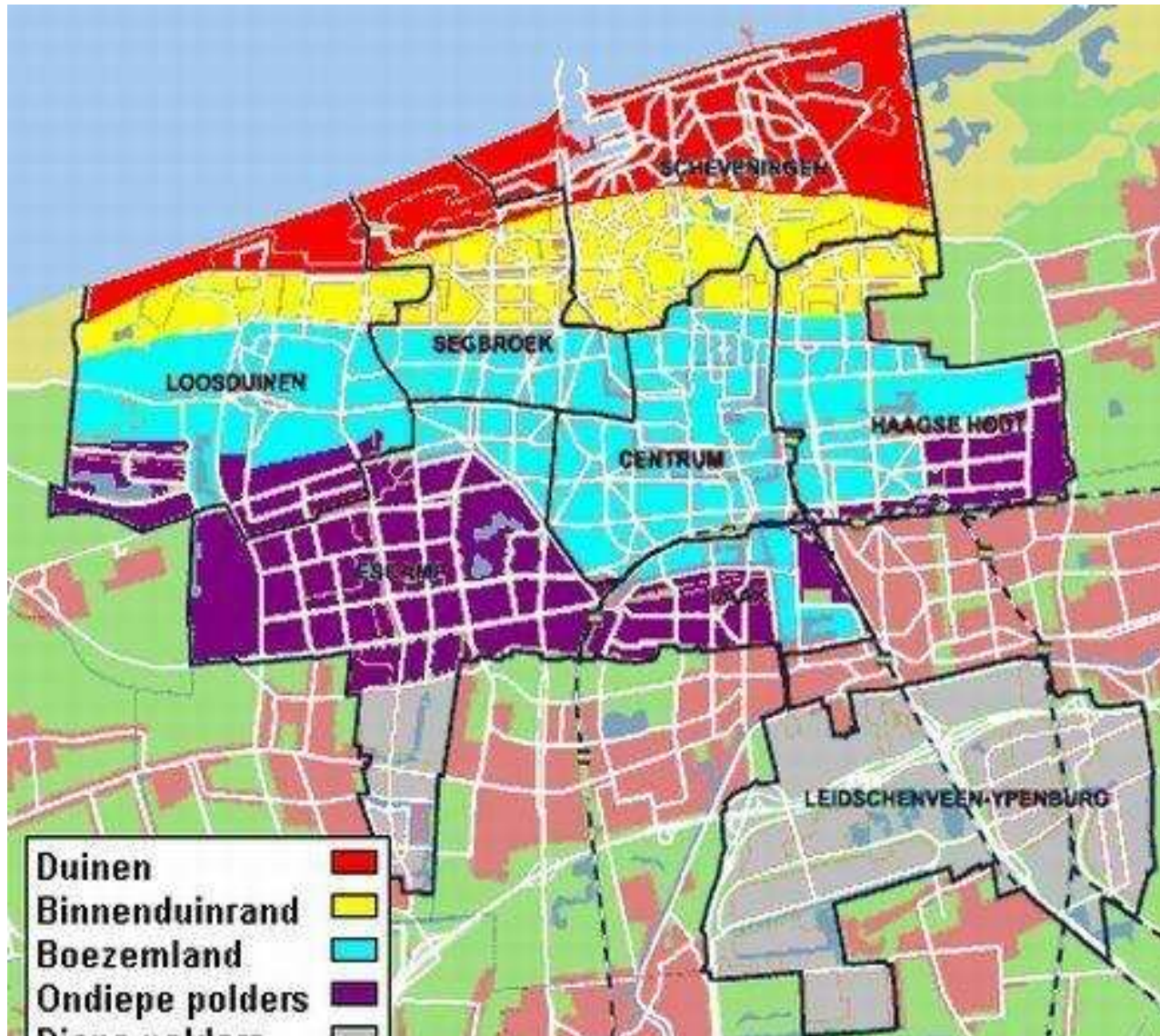
In time: Government of 'het graafschap Holland', the 7 republics of het United Netherlands and The Netherlands.

# Political Centre

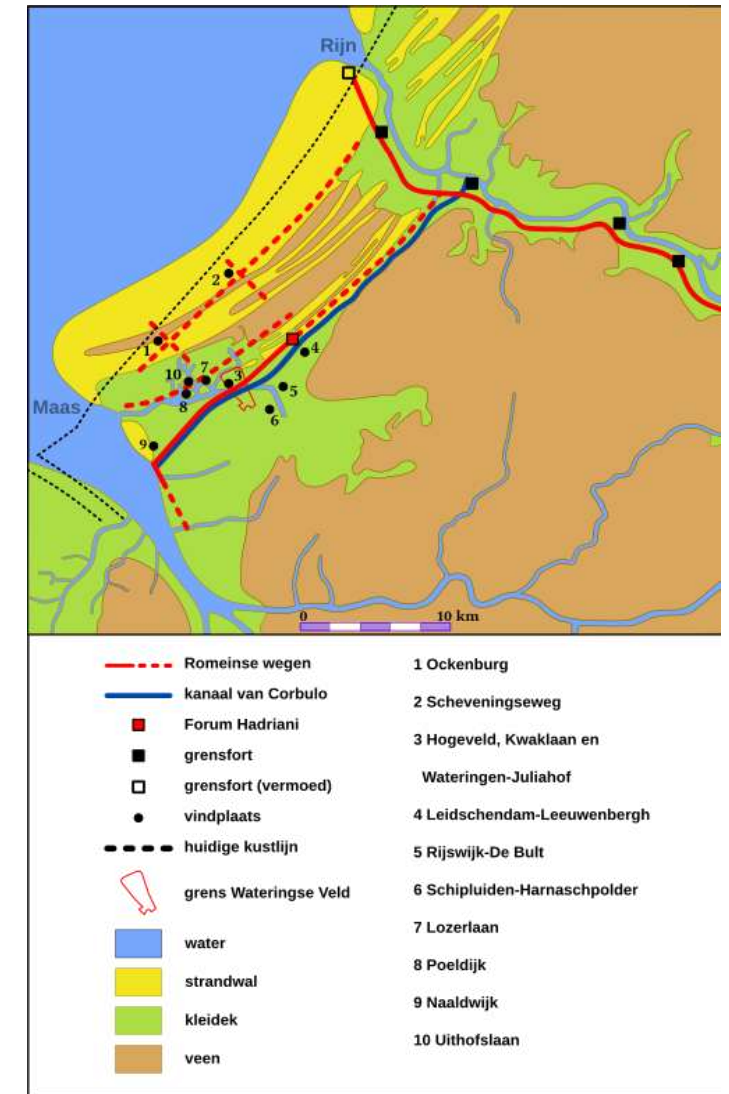


For instance: Charles II in exile in The Hague in 1660

# Sandy and peat soil



Houses were built on sandy soil (for the well-to-do-residents)  
 Later on houses were also built on peaty soil.



Layers of dunes combined with peat soil

**Industrialisation,  
railroad 1843  
tram in 1864**



**Industrialisation,  
railroad 1843  
tram in 1864**



# Scheveningen as a seaside place, spa



In the 19th century Scheveningen became a seaside place. This picture is a part of the painting of the panoramic of Scheveningen by Mesdag (1881).



Kurhaus was built in 1885.

**Industrialisation,  
railroad 1843  
tram in 1864**



# Concerns about public health



Scheveningen

Around 1850:  
First public housing on the initiative  
of rich citizens, directors of  
factories and organised labourers.

First housing association in The  
Hague 1907:

VZOS Verbetering Zij Ons Streven.

**11.30-12.00 -Wies Ettema (Housing Europe)  
Retrofit, renovation and energy poverty**



**The Hague, Netherlands**  
13th - 15th May 2026



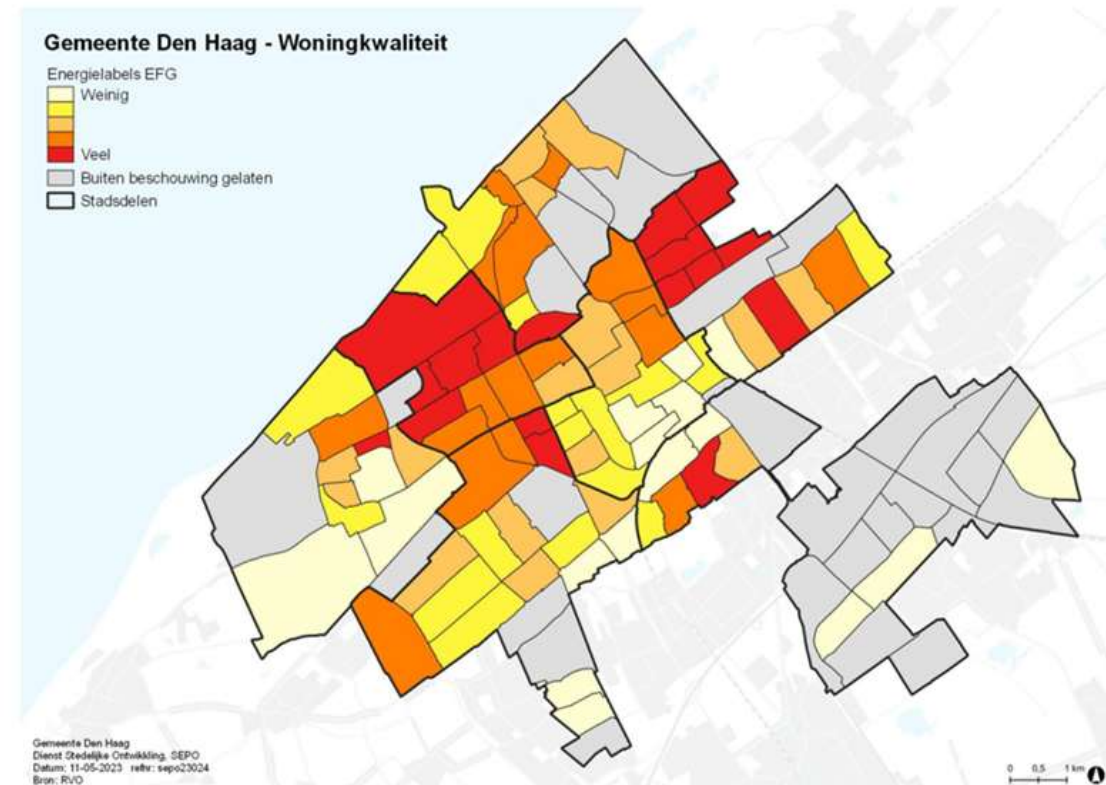
Den Haag

# Introduction

## Future proof homes

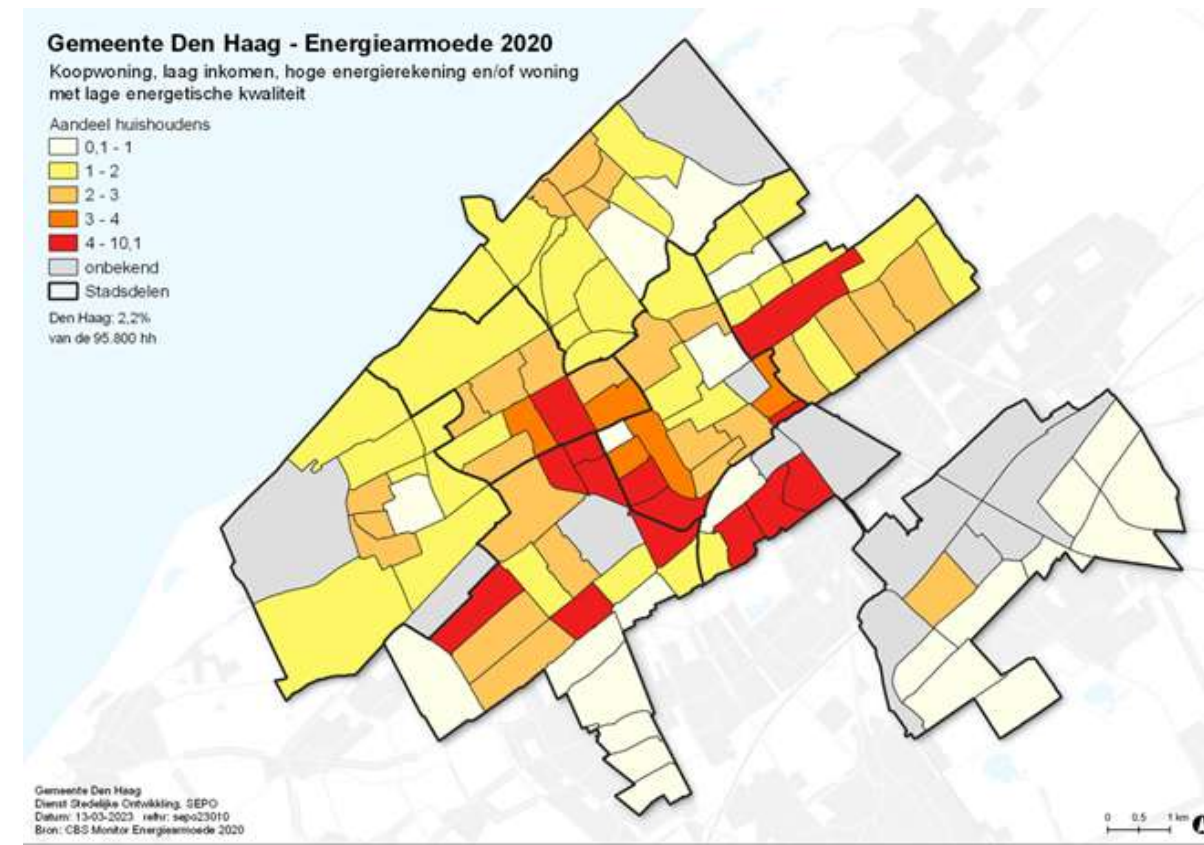
# 1c. Context: current housing stock

- ✓ About 90.000 homes have a poor energy label
- ✓ NL average: **15.5%** EFG-EPC; The Hague: **40%**.
- ✓ Majority in private housing stock



# Context: current housing stock

- ✓ Energy poverty (**9,1%** of households in **The Hague** vs. **6,1%** on **national level**)
- ✓ Overdue maintenance - especially in neighbourhoods built before WW2
- ✓ High cost of maintenance and sustainability of houses



# Zooming in on our focus areas

- **Zuidwest, mostly social**

- ✓ 33.000 homes

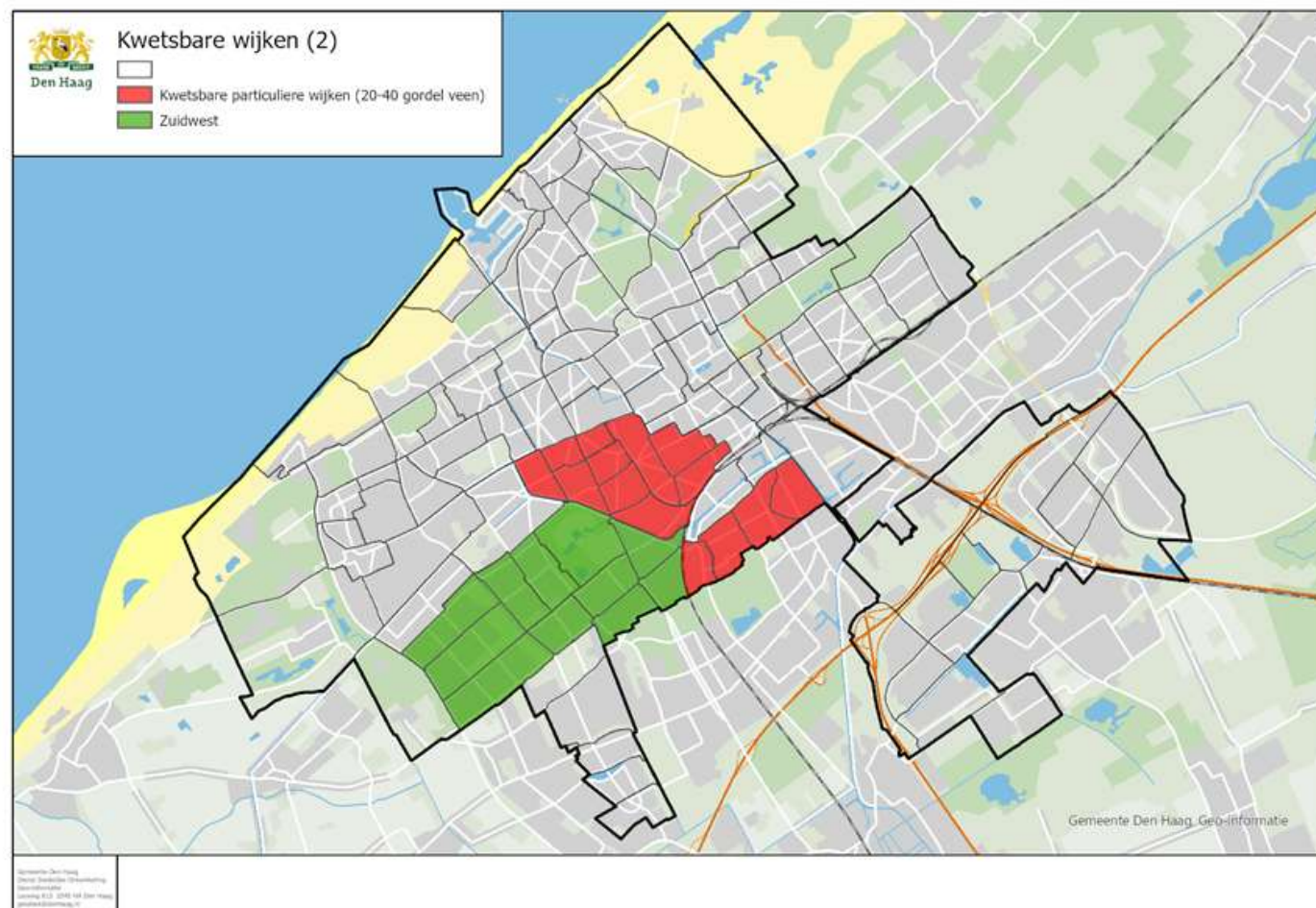
- ✓ 70.000 residents

- **Laak, Rustenburg Oostbroek,**

**Transvaal and Schilderswijk:**

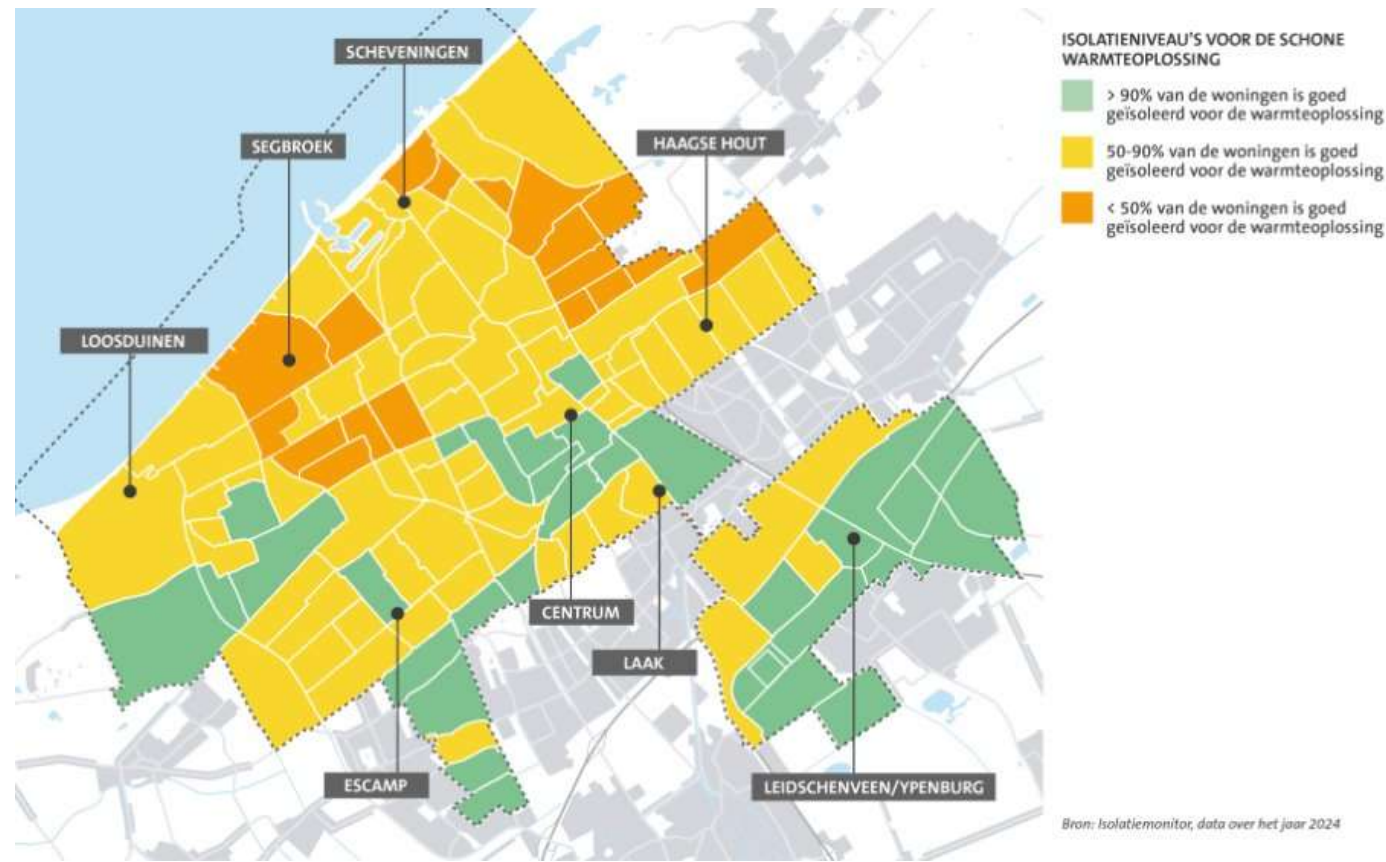
- ✓ 43.000 homes (15.000 social)

- ✓ 104.000 residents



# Link to the heat program

- Insulation is the first crucial step in the energy transition
- **75%** of homes are sufficiently insulated for the planned heating solution.



# Program insulate and improve homes

- Accelerated insulation and renovation of homes, with priority for EFG-EPC
- Objectives: reducing CO2 emissions, combating energy poverty, improving homes and making homes transition-ready
- Insulating **10,000** homes per year - Reducing the heat demand by **30%**
- By **2040**: all homes meet **the Hague basic quality**: Minimal energy for heating and cooling through proper insulation and clean energy sources, meets noise and health standards and is well-maintained and fire-safe

# Approach

1. City-wide actions
2. Actions for poorly insulated homes and that are selected for a heating network soon
3. Actions in urban renovation districts

## VERSNELLING ISOLEREN EN VERBETEREN WONINGEN





- > Extra focus op **leefbaarheid** in de wijken met veel corporatiewoningen. Bijvoorbeeld door samen te werken aan **wijkagenda's** waarin leefbaarheid, veiligheid en veerkracht samenkomen.
- > In Zuidwest pakken we **55 binnentuinen** aan met oog voor ontmoetingen en klimaatadaptatie.
- > We gaan door met **buurtkamers**: ontmoetingsruimten waarin wijkbewoners activiteiten kunnen organiseren.
- > **Veiligheidskwesaties** binnen één week adresseren.

1

## 1 Veerkrachtige en leefbare wijken



- > **Zorgzame buurten**: wonen, zorg en welzijn in samenhang organiseren, voor **huidige** en nieuwe bewoners.
- > Realiseren van meer **innovatieve en collectieve woon(zorg)concepten** voor ouderen (zowel nieuwbouw als bestaande bouw).
- > Blijven werken aan **voldoende en passende** huisvesting met begeleiding voor mensen in kwetsbare situaties.

5

## 5 Wonen met zorg en huisvesten aandachtsgroepen



- > Uitfaseren **EFG-energielabels** in regulier bezit voor 2029.
- > Vaststellen **warmteprogramma** met daarin hoe de komende 10 jaar wijken en buurten overgaan op **duurzame warmteoplossingen**.
- > Samenwerken aan **klimaatadaptieve maatregelen** zoals voor hittestress en wateropslag in buitenruimten en binnentuinen
- > Uitwerken van **Haagse Basiskwaliteit**.

4

## 4 Duurzaamheid en woningkwaliteit



## Haagse Woonafspraken 2026-2030



2

## 2 Voldoende sociale huurwoningen

- > Bouw van **4.800** nieuwe sociale huurwoningen, 1.200 studentenwoningen en 700 middenhuurwoningen.
- > Betere **samenwerking** tijdens de verschillende fases van het woningbouwproces
- > Beter benutten **bestaande voorraad** door doorstroming, woningdelen en minder leegstand.



- > Streven naar **nul huisuitzettingen** op basis van huurachterstand.

- > **Tijdige signalering** van betalingsproblemen en toegankelijke inkomensondersteunende regelingen.

- > **Kwijtschelden** gemeentelijke belastingen voor lage inkomens.

- > **Maatwerk** vanuit corporaties in schrijnende gevallen.



3

## 3 Betaalbaarheid woonlasten



**In samenwerking met onze woonpartners:** Arcade, DUWO, Haag Wonen, Hof Wonen, Staedion, WoonInvest, Woonzorg Nederland en hun huurdersorganisaties. Ook Mooiland, Nester, Rijswijk Wonen, Vidomes en de Wassaenaarsche Bouwstichting werken hieraan mee.

# Collaboration with housing associations

- Collab for mixed HOA's: jointly contracted external process facilitator and subsidy scheme (€2,300 to €14,000) per apartment for maintenance and insulation measures
- Collab to connect housing associations first to district heating networks
- Subsidy for induction cooktops for social housing tenants
- 10 annual climate-adaptive & circular interventions, municipal support with knowledge, co-financing, subsidies
- Joint tenant awareness on heat stress
- The Hague Damp & Mold Approach
- Energy poverty collab (Behaaglijker wonen, agreement with subsidy)

# Challenges we experience

- Few instruments to steer as a municipality
- Many (inactive) HOA's and long decision-making processes
- Low investment capacity among vulnerable residents
- In our region, housing associations face the largest budget deficit in NL (-€800 million).

# Housing association

- The association issued **shares**.
- This was invested in **good affordable housing**: Bedsteads (instead of straw mats), separate cooking and drying areas, connected to the new water pipes and sewers.
- Intention was to yield a return in order to establish a **revolving fund**.
- Concepts: '**cleanliness**', '**tidyness**', '**domesticity**', and '**morality**'
- **Strict regulations** and immediate eviction was possible.

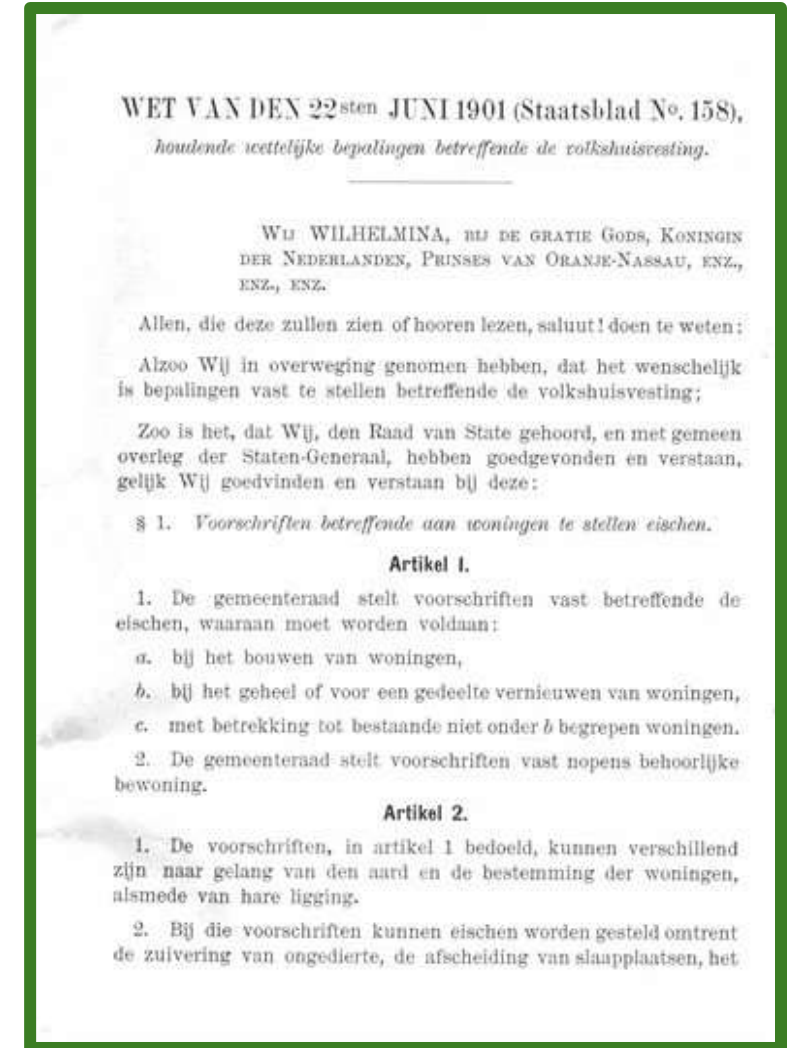
# Housing Act in 1901

The first act is the Housing Act 1901. The purpose of the Housing Act was:

- to make **unhealthy dwellings impossible** and
- **to promote the construction of good housing.** It was the first act regarding public housing in the Netherlands."
- But public housing should not disrupt the market and should not be charity. **The aim was to help the poor help themselves.**

Roles:

- The **municipalities**: They were expected to provide 'private initiative' with full scope, could declare a dwelling uninhabitable, expropriate and clear a slum.
- The Dutch **central government** largely left the construction to others, and mostly limited itself to the role of financier, regulator, and supervisor.
- The **housing corporations** acquired a central role in the public housing sector in the Netherlands.



# Housing Act in 1901



Wassenaarstraat 64



Tesselschadestraat 1950 with innercourt, playground.

# The Hague in 2025

- **Third largest city** of the Netherlands: **569.000** residents in 2025.
- **The Hague housing associations** provide 80.000 affordable houses, about **30%** of the total housing stock.



Challenges:

- **Housing stock: Old versus new.** As in many G4 cities a significant portion consists of pre-war and post-war housing, with a relatively limited part of recent construction.
- Population growth the next 25 years around **100.000 residents.**



# Strategic housing policy: Woonvisie Den Haag 2040



- Building affordable housing in all parts of the city
- Housing solutions for target groups
- Future-proof and sustainable housing
- Vital and liveable neighbourhoods

A stylized white line-art illustration of the Den Haag skyline, including a prominent church spire and various building silhouettes, set against a light blue background.

**WIJ ZIJN DE GEMEENTE DEN HAAG**  
en we zouden met niemand willen ruilen.

**12.00 – 12:40 Alice Pittini**  
**Social Housing Across Europe (Housing Europe)**



**The Hague, Netherlands**  
13th - 15th May 2026

12:40- 12:50



**The Hague, Netherlands**  
13th - 15th May 2026

## 12:50 – 13.20 - Lunch



The Hague, Netherlands  
13th - 15th May 2026

**13:20 – 13:50 Tim Jacobs City of The Hague**  
**Mold and moisture**



**The Hague, Netherlands**  
13th - 15th May 2026



Den Haag

# The Hague approach of damp and mold

*in association homes*

# Content

- Damp and mold in The Hague
- The Hague approach of damp and mold
- The independent damp and mold expert
- An external evaluation of our approach
- A summery and conclusion of our approach

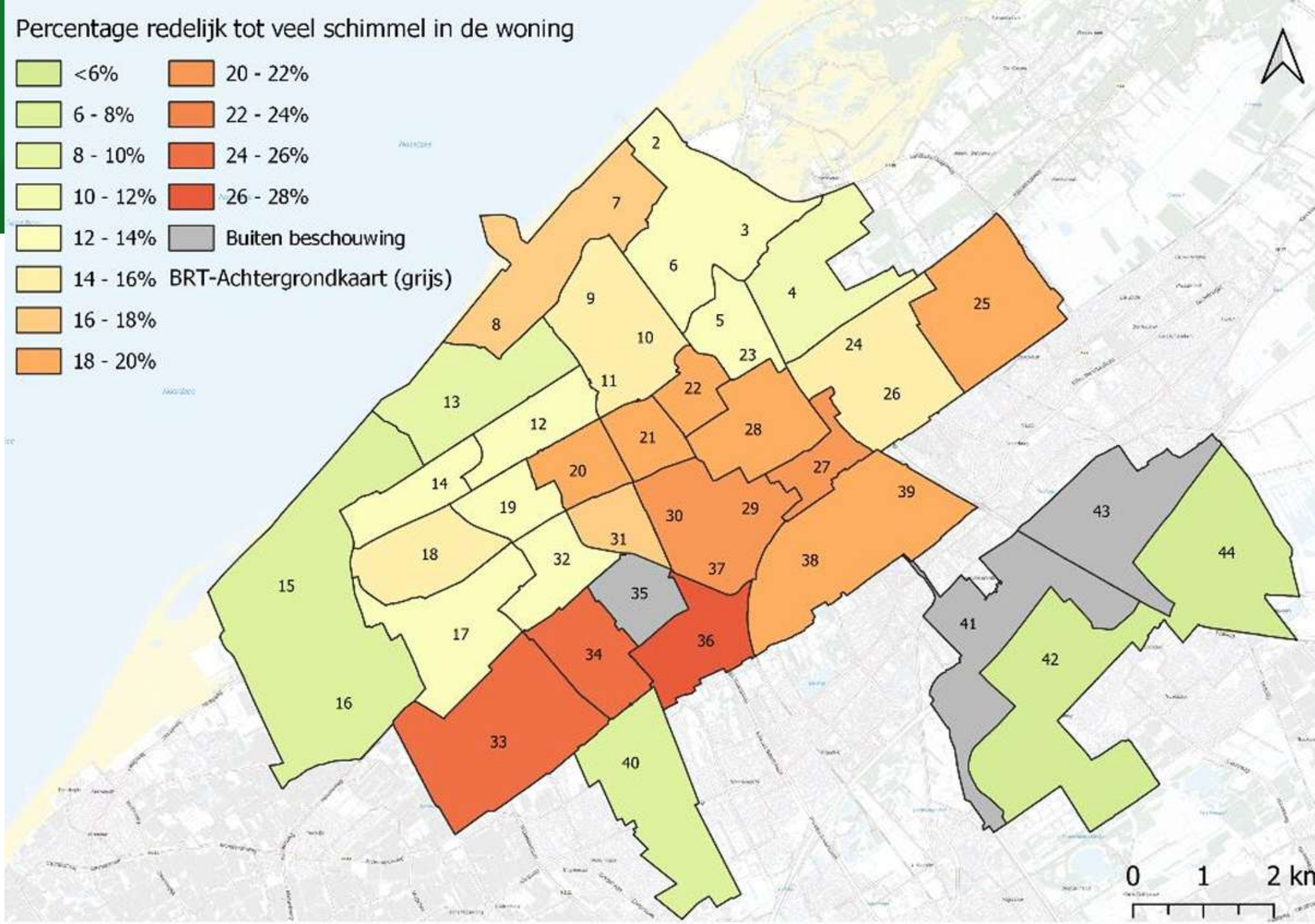
# Damp and mold in The Hague

- Damp and mold in houses are a great problem in The Hague.
- It is a problem in all housing: in both private and public housing, also for home owners
- We have various research to substantiate these claims.

# Damp and mold in The Hague

- **WoON 2024: National housing research, with oversampling in The Hague**
  - Share of households with damp and/or mold problems in The Hague:
    - Housing associations: 32% in 2021 - 35% in 2024
    - Private rental housing: 28% in 2021 - 42% in 2024
    - Home owners: 16% in 2021 - 21% in 2024
    - No context about e.g. the size of the problems.
- **Woningschouw 2021-2022: housing research in The Hague, on command of the Municipality**
  - Share of households with moderate to severe mold problems in The Hague:
    - Housing associations: 20%
    - Private rental housing: 27%
    - Home owners: 8%
    - Gives an image about where in the city the most problems are

# Percentage redelijk tot veel schimmel in de woning



# The Hague approach of damp and mold

## *in association homes*

- Founded in 2016, a collaboration of the Municipality, GGD (municipal health organisation) and four housing associations. Since last year there are five involved.
- Agreements since 2016:
  - We inform the tenants intensively;
  - We optimize the internal processes;
  - There will be an independent mold expert;
  - We inform the council from time to time.
- We did an extensive, external evaluation in 2025

# The Hague approach of damp and mold

*in association homes*

1. Informing and prevention
2. The tenant reports the problem
3. The association handles the problem
4. The expert can be consulted
5. Aftercare can be provided



# The Hague approach of damp and mold

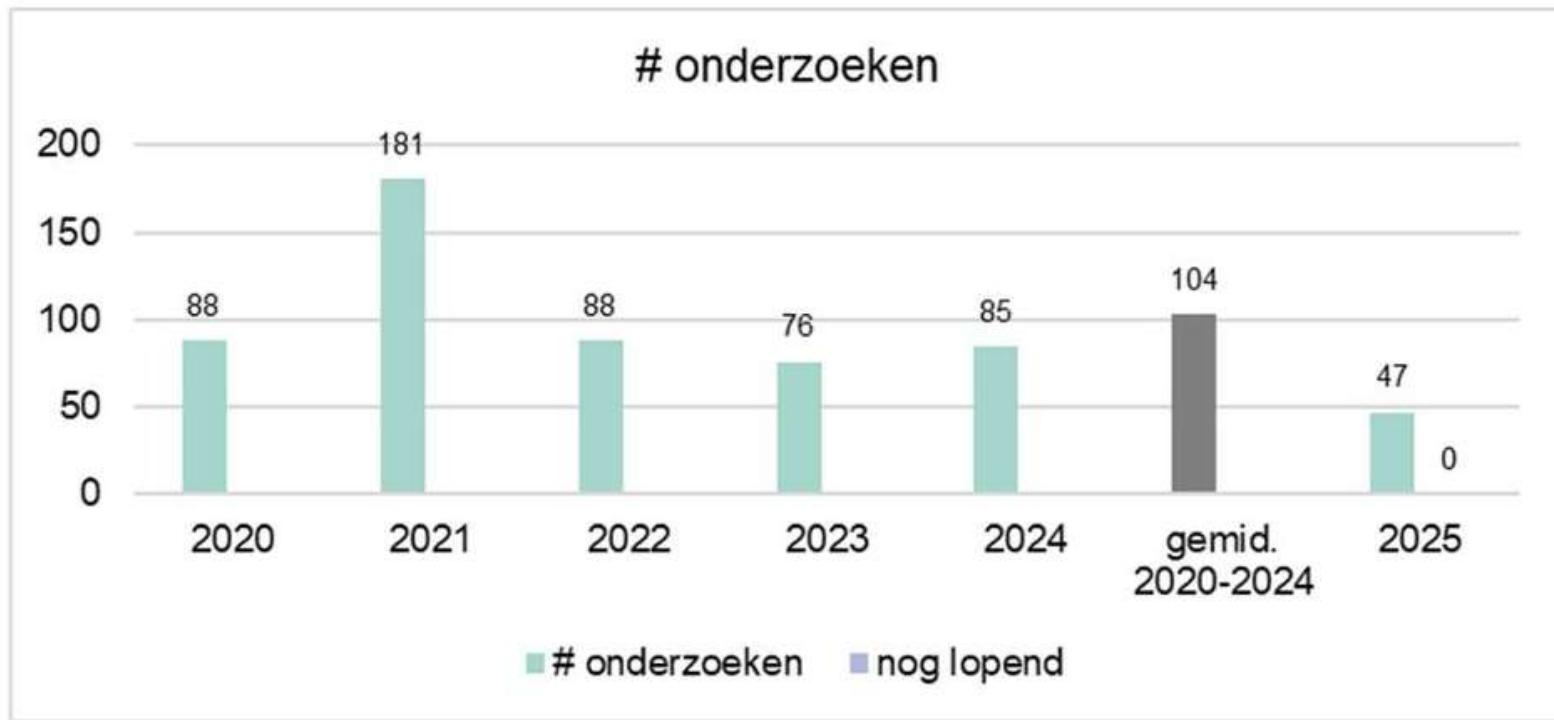
*in association homes*

- The independent expert is an important part of the approach.
- When the association is not able to fix the problem, or when the tenant is unhappy with the solution, both parties are able to step up to the expert.
- The expert does an extensive investigation in the house, and writes an extensive report about the problems and the solutions both parties need to take to fix the problems. Parties are obligated to take the steps.
- In the most cases, there are complicated problems that have multiple causes.
- Since 2025 they also do random checks to see if the measures are really taken.

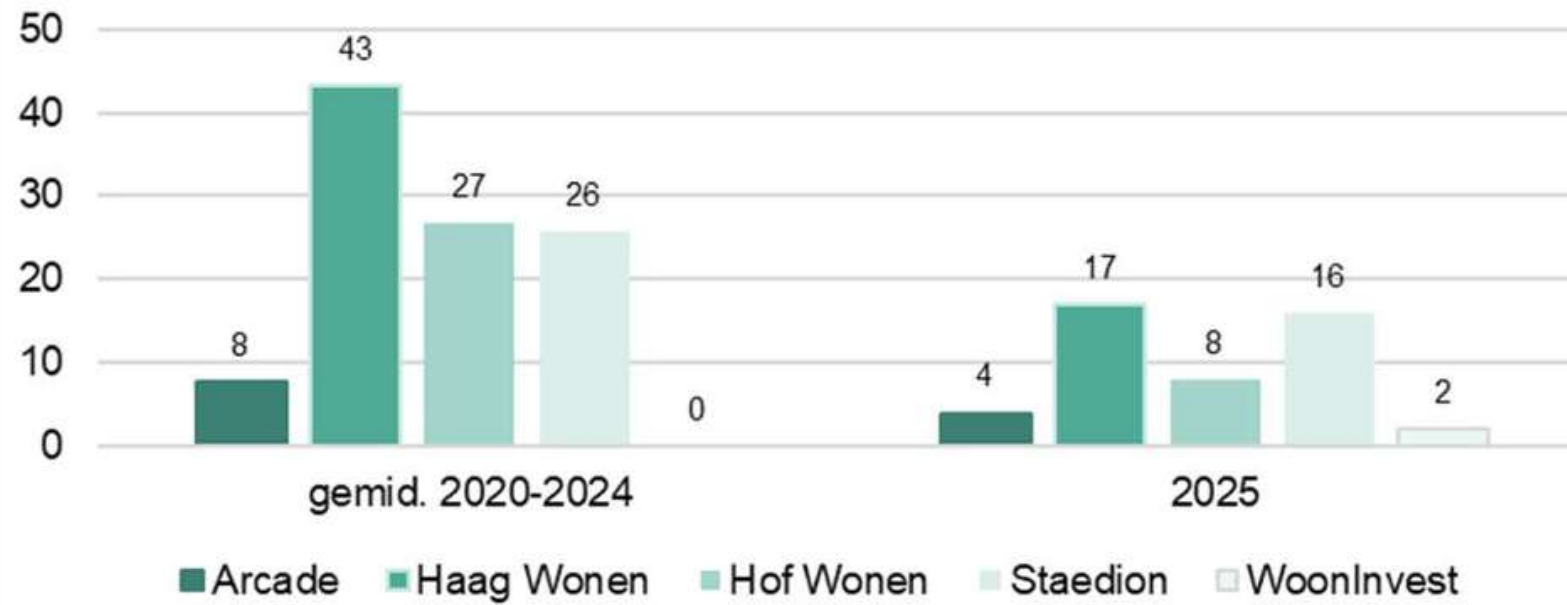
# The independent damp and mold expert

- The expert is highly valued by all involved parties.
- It is the tool that keeps the collaboration working amongst all the parties.
- The municipality pays for 25% of an investigation, the association for the other 75%.
- They also give lectures about mold and tenant behavior to the associations.
- Their numbers give us insight in the most difficult cases.

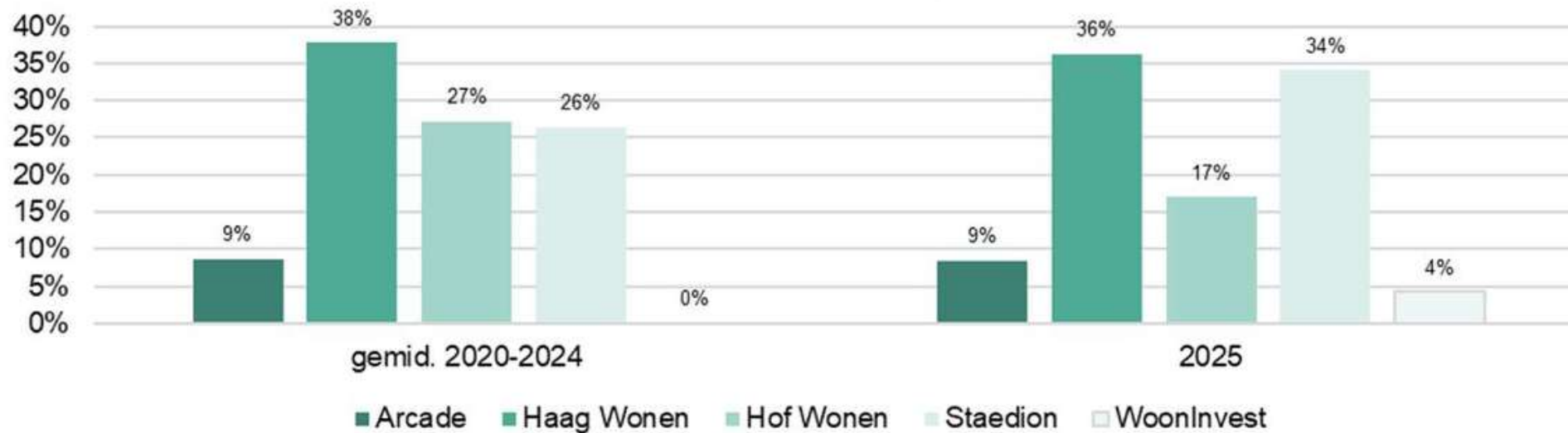
CAUBERG  
HUYGEN



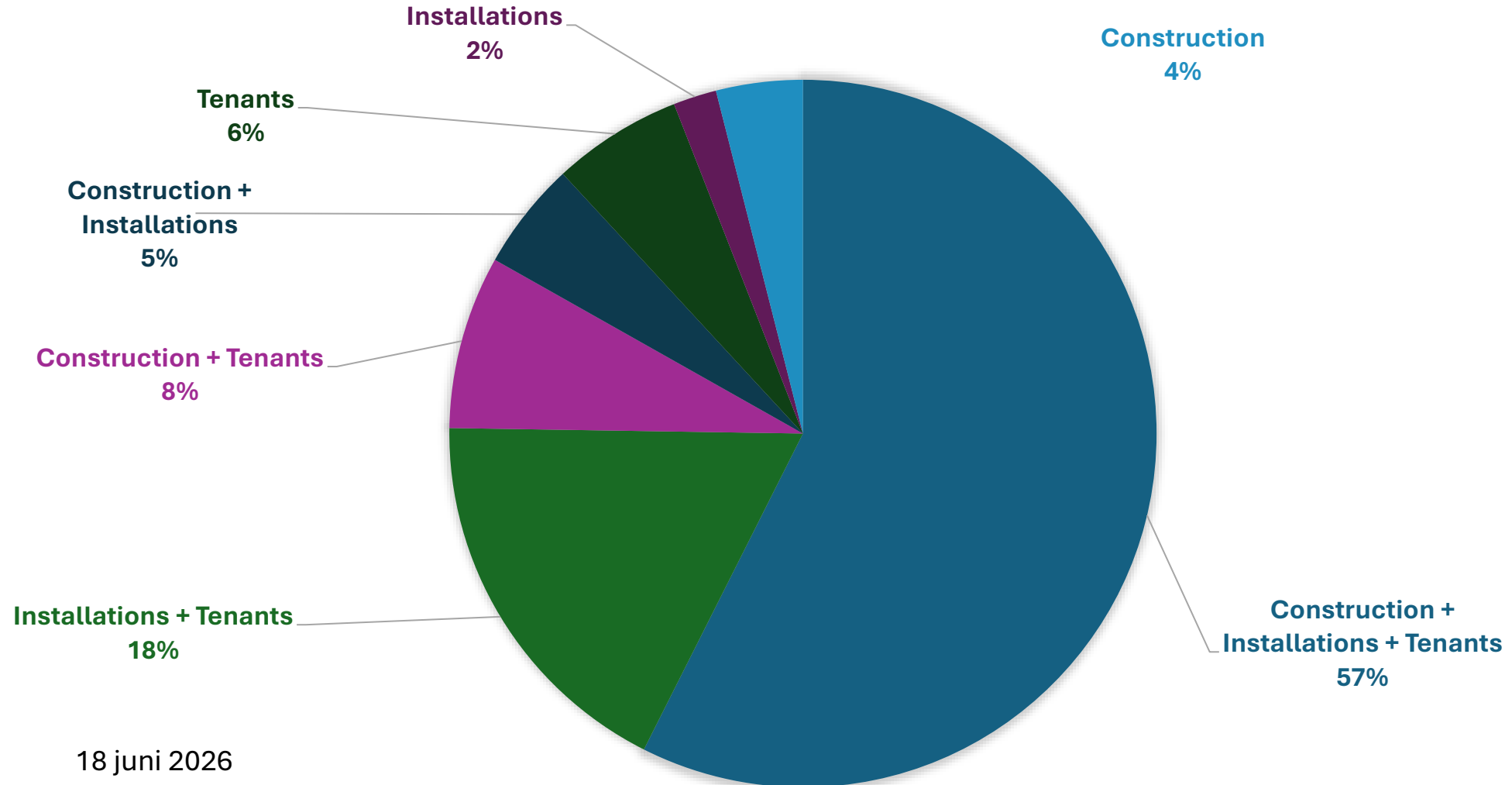
### # onderzoeken per corporatie



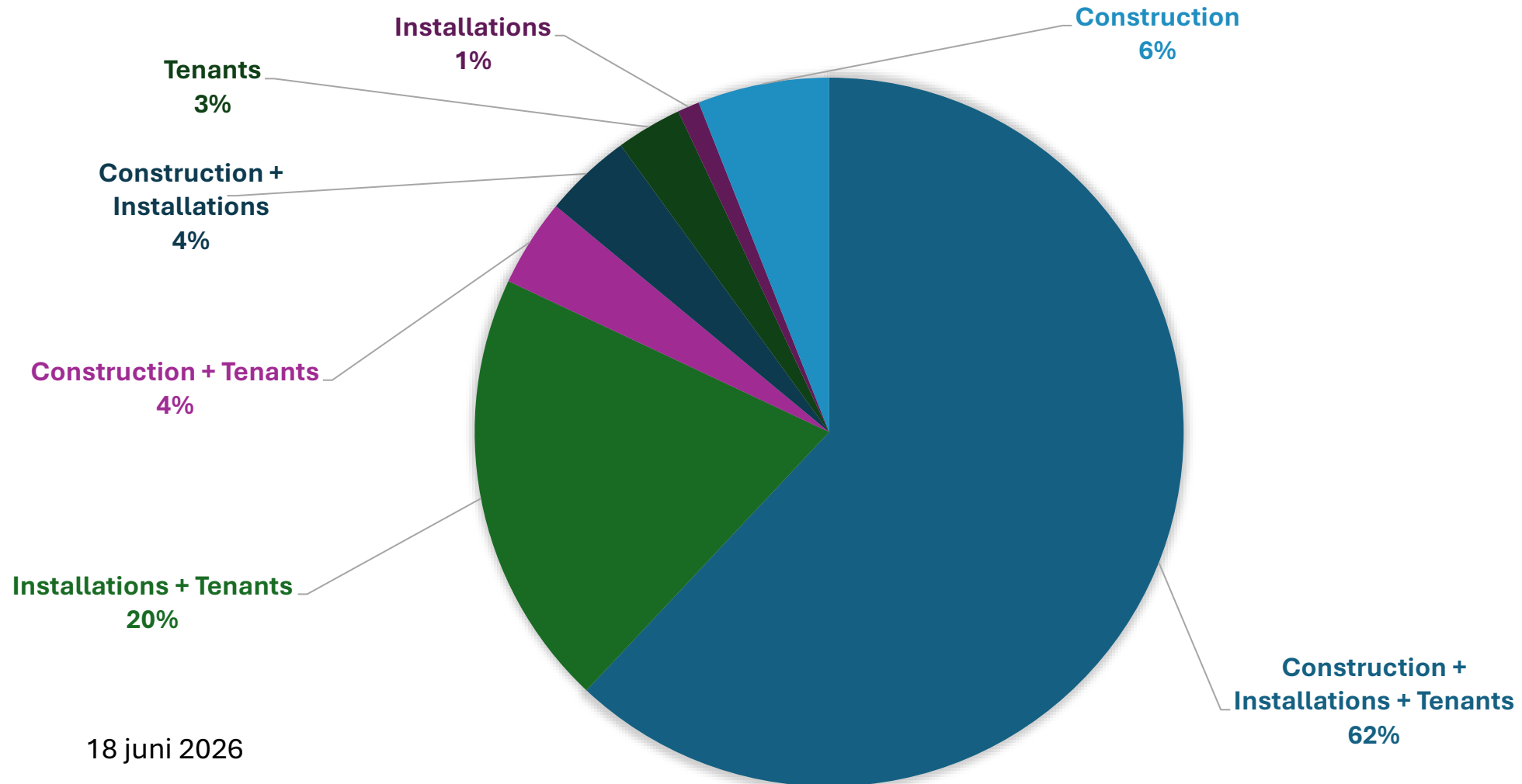
### # onderzoeken per corporatie



# 2020 - 2024



2025



# An external evaluation of our approach

- We did an external evaluatie of our approach, together with the GGD and the associations.
- The conclusion is that the collaboration works well, but there is room for improvement.
- There are 11 recommendations for all the parties, for all the phases in the process.
- At this moment we are having meeting with the associations and the GGD to put those recommendations in new agreements.
- We plan to have it on paper end 2026.
- We don't control the associations, some agreements are difficult to make. We take Amsterdam as source of inspiration.



# An external evaluation of our approach

- Some conclusions:
  1. Informing the tenants is a large challenge. How the tenants use their home will always be a great part of the problem.
  2. Tenants don't think that associations always handle directly when they report problems; communication with tenants is unsatisfactory.
  3. The expert is the biggest added value in the approach.
  4. There is not really much aftercare.
  5. We have no numbers on whether associations actually fix the problems. Here tend to be disagreements between association and tenants. Therefore we cannot say if the approach is effective.

Component	Areas for Improvement
<b>Providing Information</b>	<ol style="list-style-type: none"> <li>1. Focus the information provision and work collaboratively.</li> <li>2. Jointly develop visual explanations/materials.</li> <li>3. Consider including in the standard approach that tenants always receive a combination of (repeated) oral information and written information (including visual explanations) about the use of the dwelling (for example upon moving in).</li> </ol>
<b>Reporting</b>	<ol style="list-style-type: none"> <li>4. Improve communication with the tenant after a report has been made, where possible.</li> </ol>
<b>Handling</b>	<ol style="list-style-type: none"> <li>5. Invest in ensuring adequate knowledge among the (initial) technical professionals to support the formulation of a high-quality diagnosis.</li> <li>6. Promote increased knowledge sharing between housing associations, and from the damp and mould expert – as well as the Public Health Service (GGD) – towards the housing associations, regarding what does and does not work in the approach.</li> <li>7. Monitor whether measures are actually implemented and whether damp and mould problems have been resolved (through some form of follow-up inspection) and report on this.</li> <li>8. Consider designing the tenant satisfaction survey in such a way that it provides a better insight into satisfaction specifically with the approach to damp and mould problems.</li> </ol>
<b>The Damp and Mould Expert</b>	<ol style="list-style-type: none"> <li>9. Ensure that all tenants are aware of the possibility of engaging the damp and mould expert.</li> <li>10. Deploy the damp and mould expert to facilitate knowledge sharing.</li> </ol>
<b>Aftercare</b>	<ol style="list-style-type: none"> <li>11. Consider making aftercare (in combination with follow-up inspections) a standard component of the Hague approach by the housing association.</li> </ol>

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# A summery and conclusion of our approach

- Damp and mold are great problems in The Hague, so we think it's important that the municipality takes action.
- Research shows that 20% of the households in association homes have moderate to heavy mold problems. And this number is growing.
- We have a pleasant collaboration with the associations to tackle these problems.

# A summery and conclusion of our approach

- The expert is an important aspect of our collaboration. It is highly appreciated by all parties, and it makes all parties apprecies our collaboration.
- The approach is good, but there are possible improvements. We are having meeting to get those on paper. That is not always an easy task, some associations do not see why we have to improve it. It is a delicate process.
- The Hague is a “pioneer” with this approach. Other municipalities are following, but they do it in their own way. There are now national policies following the example of The Hague.
- We are trying to do more for private housing, but that is even more difficult

**13:50 – 14:30 Thomas Knox Policy- VNG Solicitors**



**The Hague, Netherlands**  
13th - 15th May 2026



# Healthy Retrofit in the Netherlands

Law, Local Government and the EU compliance agenda

Tom Knox, VNG

Study Tour, National Maintenance Forum, Den Haag, May 2026

# Tom Knox

National Policy Advisor (Housing),  
VNG

VNG represents the 342 Dutch municipalities and links the national agenda to local delivery

Consultant solicitor with UK national firm MSB Solicitors; public housing since 2002; working in the Netherlands since 2019

## Why this matters for this presentation

Municipalities are not usually the stock owners, but they shape the local housing system.

The Dutch retrofit agenda is delivered through a network: State, municipalities, housing associations, tenants' organisations, contractors, health services and utilities.

The VNG perspective is about municipal powers, practical implementation and the translation of national/EU commitments into local action.

### Keep in mind

This is a municipal / system view — not a presentation from a housing association asset-owner perspective.

# Healthy retrofit is a delivery task — not just a repair problem

Dutch social housing providers must decarbonise homes, keep rents and energy costs manageable, and prevent retrofit from creating new health risks.

## **Decarbonise**

EU and Dutch targets point to an energy-efficient, low/zero-emission building stock by 2050.

## **Protect residents**

Homes must remain safe, dry, ventilated and affordable to heat.

## **Deliver locally**

Municipalities translate national policy into spatial, housing and heat-transition programmes.

## **Why damp and mould is still central**

It is a visible signal that energy, health, maintenance, ventilation, behaviour and affordability are connected.

The April 2026 letter from the Housing Minister to the Tweede Kamer (Dutch House of Commons) explicitly links damp/mould to the broader sustainability task: better insulation + ventilation = healthier homes, comfort and lower housing costs.

A healthy retrofit fails if it improves the label while making moisture, overheating, indoor air or health outcomes worse.

# What this session covers

Four linked lenses: targets, law, local delivery and EU change.

## 1. Targets

National Performance Agreements, CO<sub>2</sub>-neutral stock, heat demand reduction, E/F/G labels, affordability and investment limits

## 2. Guardrails

Belsuit bouwwerken leefomgeving (Bbl) technical minimums, tenancy remedies, housing-association governance and municipal enforcement

## 3. Local delivery

Omgevingsvisie, volkshuisvestingsprogramma, warmteprogramma and local performance agreements

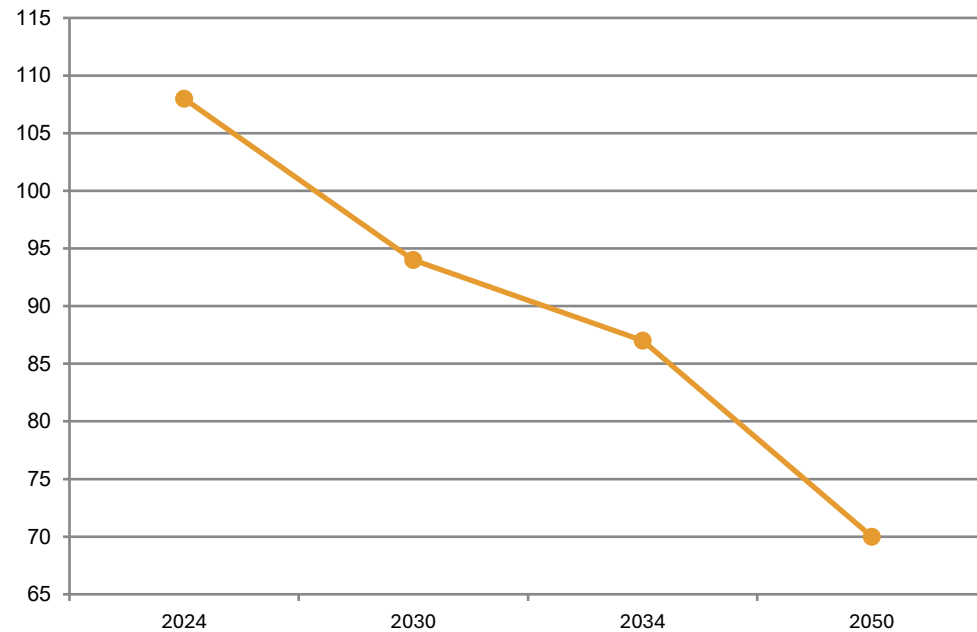
## 4. EU legislation

Energy Performance of Buildings Directive IV tranches, new energy label, renovation passport, energy house, product/asbestos developments

**Thread: healthy retrofit = energy + health + affordability + deliverability.**

# The retrofit task: national and EU targets are converging

The task is not optional: housing quality, carbon, energy affordability and finance are now joined up.



**NPA heat-demand trajectory**  
**108 → 94 → 87 → 70 kWh/m<sup>2</sup>**

### EU EPBD IV

Residential building stock: reduce average primary energy use by 16% by 2030 and 20–22% by 2035; at least 55% of reduction from worst-performing buildings.

### Dutch / corporatie agenda

Social landlords are expected to help deliver a CO<sub>2</sub>-neutral housing stock by 2050, reduce gas use and improve the worst-performing homes.

### NPA delivery pressure

Heat demand reduction is the new steering logic: reduce energy needs first, then make homes ready for sustainable heat.

# The Dutch framework: guardrails for healthy retrofit

There is no single “retrofit Act”: the system combines technical minimums, tenant remedies, corporatie governance and municipal levels.

<b>Technical minimum</b>	<b>Besluit bouwwerken leefomgeving (Bbl)</b>	Existing homes must meet minimum standards on health, safety, ventilation and moisture resistance. Retrofit cannot trade energy performance against ventilation and moisture control.
<b>System framework</b>	<b>Omgevingswet</b>	Does not set ventilation rates itself; provides the legal architecture for a safe and healthy physical living environment, sustainable development, omgevingsvisie, omgevingsplan, programmes, permits and enforcement.
<b>Tenant remedies</b>	<b>Civil Code + Huurcommissie</b>	Damp, mould, leakage and poor ventilation can be defects. Tenants can seek repair, temporary rent reduction and other remedies.
<b>Corporatie governance</b>	<b>Woningwet + NPA + local performance agreements</b>	Municipality, housing association and tenants’ organisation translate national targets into local commitments on stock quality, sustainability, affordability and liveability.
<b>Local levers</b>	<b>Bbl / Omgevingswet / housing programme / heat programme</b>	Municipalities usually do not own the stock, but shape the system through enforcement, planning, heat transition, woondeals and performance agreements.

# Besluit bouwwerken leefomgeving (Bbl): the technical floor for healthy retrofit

The Bbl does not prescribe one retrofit model — it sets minimum health and building-physics guardrails.

## Ventilation — existing dwellings

- Living space: 0.7 dm<sup>3</sup>/s per m<sup>2</sup> floor area
- Minimum 7 dm<sup>3</sup>/s per room
- Kitchen / open combustion appliance: 21 dm<sup>3</sup>/s
- Toilet: 7 dm<sup>3</sup>/s
- Bathroom: 14 dm<sup>3</sup>/s

## Moisture resistance

- External separating structures such as roof/façade must be waterproof for living rooms, toilets and bathrooms
- Floor above crawl space must protect against moisture
- Bathrooms require water-repellent floors/walls/doors up to required level

## Retrofit implication

Insulation and airtightness must be paired with adequate ventilation, moisture control and avoidance of new cold bridges. Otherwise, an energy improvement can create a health and compliance problem.

# What exactly can a municipality do without owning the homes?

Municipal power is a mix of legal enforcement, spatial strategy, programme-making and negotiated delivery.

## Enforce the floor

Bbl / Omgevingswet

Require compliance where existing buildings fall below minimum technical standards.

## Set the long-term course

Omgevingsvisie

Connect healthy homes, climate adaptation, energy infrastructure and neighbourhood quality.

## Make local rules

Omgevingsplan

Bind spatial/environmental choices into the local physical-environment plan.

## Programme housing

Volkshuisvestingsprogramma

Translate housing needs and stock quality into local priorities and commitments.

## Lead the heat transition

Warmteprogramma / Wgiw

Sequence neighbourhood heat choices and shape insulation depth and system-readiness.

## Agree delivery

Prestatieafspraken

Make annual/local commitments with corporaties and tenant organisations.

**Municipal role: system steward, convenor and enforcement authority — not day-to-day asset manager.**

# Omgevingswet: why it matters for retrofit

The Omgevingswet is not the ventilation code; it is the municipal framework for connecting housing quality, health and sustainability.

## Legal objective

Safe and healthy physical living environment + good environmental quality + sustainable development.

## Municipal instrument

Omgevingsvisie sets the long-term course for the physical environment: housing, energy, water, green, health, mobility and public space.

## Delivery chain

Vision → programmes → omgevingsplan → permits / supervision / enforcement → local performance agreements.

## Municipal translation for healthy retrofit

Use the omgevingsvisie to articulate that sustainable homes must also be healthy, affordable and climate-adapted.

Use programmes and performance agreements to prioritise stock improvement in vulnerable neighbourhoods.

Use enforcement and monitoring where homes fall below minimum technical standards.

# The Hague Omgevingsvisie: a city story for healthy retrofit

A concrete example of how a municipality can connect housing, health, energy and climate in one long-term vision.

## 2050 ambition

A healthy, just and sustainable city — “Thuis in een groene metropool aan zee”.

## Housing stock

Affordable, accessible and future-proof housing stock; existing homes need improvement and sustainability upgrades.

## Basic systems

Energy, water, soil, networks and climate resilience are treated as the conditions for a functioning city.

The omgevingsvisie shows why healthy retrofit is not just a landlord issue: it is part of the city’s physical-environment strategy.

Housing quality connects with climate adaptation, heat networks, grid capacity, groundwater, green space, mobility and social inequality.

For municipalities, the retrofit question is not only “which homes?” but “which neighbourhoods, which systems, which sequence, and who pays?”

# National Performance Agreements: where targets become housing association tasks

The NPA 2025–2035 create the national framework for social housing delivery, but they need local translation.

## Sustainability

Heat-demand reduction, E/F/G phase-out, insulation, readiness for sustainable heat.

## Quality

No homes with a poor state of maintenance; damp/mould, lead pipes, asbestos and fire safety in the stock-improvement agenda.

## Affordability

Improvement and insulation should support lower energy demand and manageable living costs.

## Localisation

NPA → woondeals → municipal programmes → local performance agreements with housing associations and tenants.

# The retrofit agenda meets a financial boundary

The legal and policy task is expanding, while the corporate financing model is under pressure.

## Short to medium term

Government is exploring measures to expand investment capacity, including tax relief and financing instruments.

## NPA gap

The NPA task is already financially challenging; commentators point to a large deficit even before the post-2035 question.

## From 2035

The Minister has stated that the current system reaches its financial limits around 2035 and that housing associations may no longer be able to attract new loans within the current system.

Healthy retrofit is not only a technical or legal challenge — it is a financing and prioritisation challenge.

Municipalities need realistic, multi-year agreements because corporaties face competing tasks: new-build, affordability, renovation, safety, liveability and energy transition.

For VNG, the question is how national ambitions can be made deliverable locally with sufficient resources and workable rules.

# Future-proof building regulation: the VNG position

The Bbl is the technical floor, but VNG argues the regulatory system must be modernised for quality, sustainability and deliverability.

## Municipal task

Municipalities are competent authority for building, alteration and demolition: permits, notifications, supervision, enforcement and the omgevingsplan.

## VNG ask

Future-proof building rules should consider environmental performance, energy performance, climate resilience, nature inclusivity, circularity, demountability, accessibility, ageing and fire safety.

## Experimentation

VNG supports space to test new techniques, materials, higher ambitions and new insights — sometimes through experiments around the Bbl — so regulation stays current.

## Retrofit angle

The debate is not simply “more rules” or “fewer rules”. For healthy retrofit, the question is whether building regulation supports faster delivery while safeguarding health, ventilation, climate adaptation and long-term quality.

# Damp and mould: the visible stress test for healthy retrofit

The Dutch government treats moisture and mould as a housing-quality, health and retrofit issue — not just a tenant behaviour issue.

## WoON2024 signals

20%  
of households reported  
damp/mould in 2024  
(up from 15% in 2021)

29%  
of corporatie tenants  
reported damp/mould  
(up from 24% in 2021)

31%  
in the four largest cities

## Policy response

Explicitly include damp/mould in local performance agreements: signalling, follow-up, monitoring and prevention.

NPA three-part approach: housing association action, increased reporting, independent experts.

€2m/year 2027–2029 for independent experts; 75% landlord contribution, 25% state subsidy via municipalities.

This experts brought in when landlord/tenant cannot reach agreement/solution. Expert provides independent report with conclusions and recommendations.

# The Hague approach: local partnership before national scale-up

The national expert model is inspired by the Haagse Aanpak Vocht en Schimmel.

## Partnership since 2016/2017

Municipality + GGZ (local NHS/LA public health dept.) + housing associations: Staedion, Haag Wonen, Vestia/Hof Wonen, later Arcade and WoonInvest.

## Five-part model

Resident information → report to housing association → housing association handling → independent expert if unresolved → aftercare/follow-up.

## Evaluation lessons

Expert is highly valued; communication and process transparency need improvement; aftercare and follow-up checks are important.

## Why it matters for UK audience

This is a practical example of a **municipal convening role**: the city does not replace the landlord, but it creates a trusted local route for complex cases and system learning.

# Warmteprogramma: why municipal heat planning shapes retrofit

The depth, timing and type of retrofit depends on the future heat solution for each neighbourhood.

## Neighbourhood sequencing

Which areas move first? Which are no-regrets? Which wait for infrastructure?

## System choice

Heat network, all-electric, hybrid, residual heat, geothermal or interim solution.

## Asset implication

Insulation depth, ventilation, indoor temperature, affordability and grid capacity are all affected.

Municipalities are expected to use heat programmes to make local choices about sustainable heat.

Housing associations need this certainty to plan multi-year retrofit programmes and tenant engagement.

The wrong sequence can create stranded investment, unaffordable heat or incomplete retrofit.

# EPBD IV: the EU retrofit agenda is entering Dutch law in tranches

The Netherlands is not implementing EPBD IV through one single law; it is staged through Bbl, Omgevingsregeling and related instruments.

**29 May 2026**

**1st tranche**

Solar, charging infrastructure, bicycle parking, technical building systems, inspections, energy label, supporting instruments.

**1 Jan 2027**

**2nd tranche**

Zero-emission new public buildings from 2028; whole-life carbon calculation for new buildings >1,000 m<sup>2</sup>.

**1 Jul 2027**

**3rd tranche**

Rules for 2030: MEPS for non-residential buildings; values for zero-emission existing buildings.

**2030**

**4th tranche**

Zero-emission new buildings; new label scale; modernised energy performance method.

# What EPBD IV means for residential and social rented homes

For housing associations, the EU agenda is less about one single duty and more about the direction of the entire regulatory system.

## New energy label

From 29 May 2026: new design, more information, indicators, links to support and whether a home meets the insulation standard.

## Renovation passport

A step-by-step route toward nearly/zero-emission buildings, linked in NL to customised energy advice and EP-online registration.

## Energiehuis

One recognisable support point for owners, users and residents, building on municipal energy desks.

## Residential trajectory

Member States must reduce average primary energy use in residential buildings by 16% by 2030 and 20–22% by 2035, with at least 55% of the reduction from the worst-performing buildings.

# Dutch national direction: worst-performing rental homes first

The EU sets the trajectory; Dutch policy is translating it into rental-stock obligations and corporate performance expectations.

## Proposed rental standard

Rental homes with labels E, F or G to be improved to at least label D by 1 January 2029, to be embedded in the Bbl.

## Corporate commitments

Housing associations are already expected through the NPA to phase out poor labels, improve insulation and reduce heat demand.

## Municipal relevance

Municipalities need data, capacity and workable routes (via local performance agreements) to connect legal minimums with local stock-improvement plans.

## The healthy-retrofit condition

Moving poor-label homes up the scale is necessary, but not sufficient: improvement must also address ventilation, moisture, thermal comfort, affordability and resident trust.

# Asbestos and legacy risks: retrofit opens the building fabric

Healthy retrofit also means managing what is already inside older homes and building systems.

## Current Dutch reality

New asbestos use is banned, but legacy asbestos remains in older homes; retrofit/demolition can trigger inventory, notification and certified removal duties.

## EU worker protection

Revised Asbestos at Work Directive lowers exposure limits and strengthens measurement/prevention requirements.

## Pipeline risk

An EU asbestos screening/register initiative has been announced but postponed. Not yet adopted — but politically relevant as the renovation wave accelerates.

## Practical point

Do not treat asbestos, lead pipes, fire safety and moisture as separate from retrofit planning.

The NPA stock-quality agenda includes damp/mould, lead pipes, asbestos and fire safety.

Retrofit programmes need portfolio-level surveys, procurement controls and tenant communication.

# Climate adaptation: the next retrofit blind spot?

Healthy retrofit cannot only be about energy: heat, water, foundations and green infrastructure are becoming asset risks.

## Heat stress

Better insulation without summer comfort can intensify overheating risk, especially in vulnerable households.

## Water and foundations

Flooding, groundwater shifts and foundation problems can affect homes across ownership boundaries.

## Neighbourhood measures

Greening, shade, drainage and water retention often require municipal/public-realm action.

## VNG/local-government link

Climate adaptation is exactly where the municipal role matters: individual landlords can adapt homes, but public space, water systems, shade, underground infrastructure and area-based sequencing sit with municipalities and partners.

# What can a UK housing audience take away?

The systems differ, but the delivery challenge is familiar.

## Same pressures

Ageing stock, energy costs, damp/mould, resident trust, contractor capacity, funding gaps and decarbonisation targets.

## Different machinery

The Dutch system relies heavily on local performance agreements as link between objective from central government and action (by housing associations)

## Shared lesson

Retrofit must be judged by health, comfort, affordability and durability — not just energy label improvement.

## What can the Netherlands take from England?

The Dutch government has committed to examine England's Awaab's Law by the end of 2026. That creates a live policy dialogue on whether Dutch remedies should move toward clearer response duties for serious housing-health risks.

# The VNG story: making national ambition locally deliverable

VNG's role is to represent municipalities and help convert national/EU ambitions into workable local practice.

## Voice

Represent the municipal interest nationally: implementation capacity, realistic regulation, local flexibility and adequate finance.

## Tools

Guidance, model instruments, knowledge sharing, local performance-agreement support and implementation networks.

## Delivery

Connect housing, planning, heat, health, climate adaptation and social policy at municipal level.

**Healthy retrofit only works if legal standards, funding, municipal capacity, corporate investment plans and resident experience are brought together locally.**



## Contact details

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[tomknox@msbsolicitors.co.uk](mailto:tomknox@msbsolicitors.co.uk)

**14:30- 15:00 Alfred van 't Hof (Haag Wonen)**



**The Hague, Netherlands**  
13th - 15th May 2026

15:00-15:10



**The Hague, Netherlands**  
13th - 15th May 2026

**10.00 – 10.30 – Kaie Small-Warner and Kunal Karadia BRE**  
**Using building data to shape policy, investment and delivery**



**The Hague, Netherlands**  
13th - 15th May 2026

**10:30- 11:10 Dr Eve Blezard – CIH**



**The Hague, Netherlands**  
13th - 15th May 2026

12:00 – 12:10



**The Hague, Netherlands**  
13th - 15th May 2026

**11:15 – 11:40 Joost Nieuwenhuijzen**  
**European Federation for Living presentation**



**The Hague, Netherlands**  
13th - 15th May 2026



# European Federation for Living

Connecting Europe's housing challenges with real solutions

**Where social housing, academics and business meet.**

Dr. Michael Brey, *President*

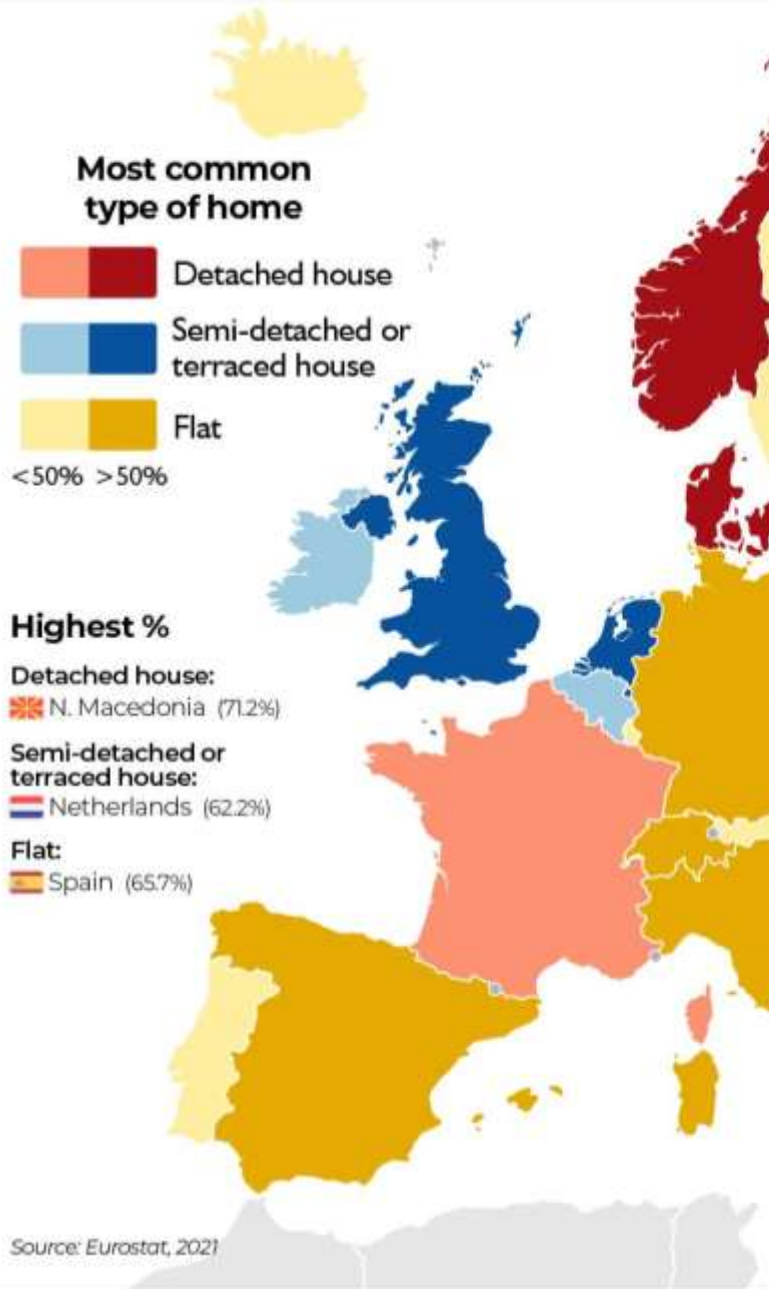
Joost Nieuwenhuijzen *Executive Director*



# Europe's housing challenge is systemic

- Shortage of affordable housing
- Rising construction costs
- Energy transition
- Ageing population
- Increasing regulation

## Most common type of home



## But solutions remain local

- Focus on local markets
- Fragmented knowledge
- Slow innovation adoption
- Repeated mistakes
- Limited / almost no cross-border learning in the sector

# EFL Composition

## KEY INDICATORS



60 MEMBERS AND ASSOCIATES



14 COUNTRIES



> 1.400.000 RESIDENTIAL UNITS AMONG MEMBERS

## STRUCTURE:

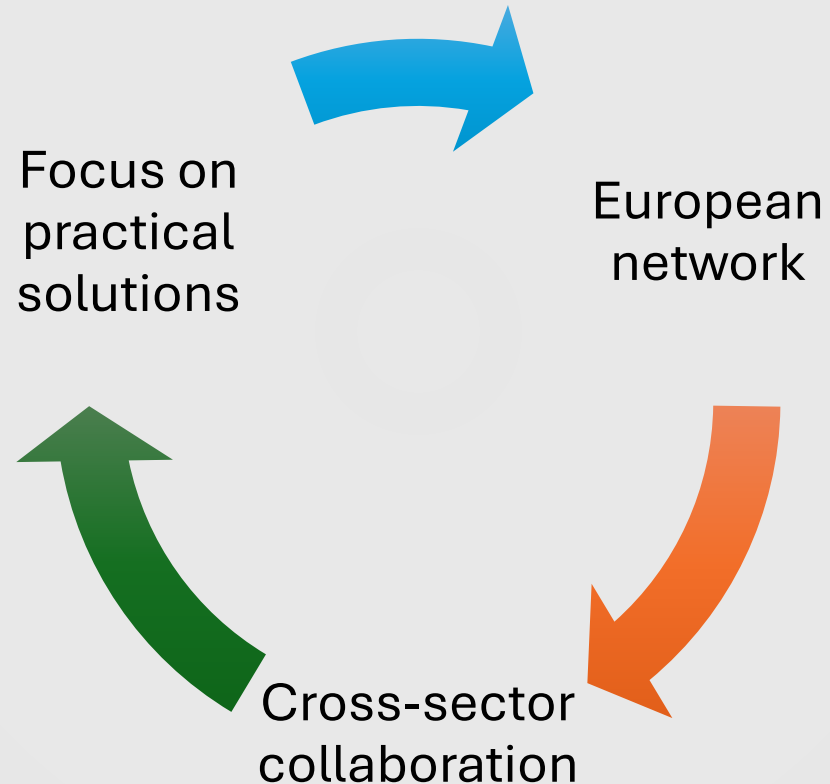
- 1 housing providers (members),
- 2 commercial companies / supply industry (commercial associates)
- 3 universities (academic associates)

**1 MEMBRES**

**2 ASSOCIÉS**

**3 UNIVERSITIES**

# EFL: learning faster than the market changes





Conference 2024

# Where innovation happens

- Construction & Architecture
- Finance & Investment
- Digitisation
- Social Housing
- Age-Friendly Living





## From discussion to implementation

- Expert groups
- Frequent interaction
- Site visits
- Decision-maker exchange



From idea to  
reality:  
modular  
housing

- Large-scale projects
- Faster construction
- Industrialised processes
- Shared knowledge
- International approach possible





## From innovation to impact

- Energy poverty
- Circular construction
- Digital tools
- AI benchmarking

# Why commercial companies engage with EFL

- Access to housing organisations
- Market insight
- Innovation involvement
- European scale



# More than a network

- Not a conference
- Not a lobby
- Working network
- Implementation focus



Housing challenges are national.  
Solutions must be European.



**EUROPEAN FEDERATION  
FOR LIVING**

**11:40 - 12:00- Marijn van Haaster (City of The Hague)  
Collaboration with housing associations**



**The Hague, Netherlands**  
13th - 15th May 2026

11.40 – 11:50



**The Hague, Netherlands**  
13th - 15th May 2026

## 12:10 – 12:35 Lunch



The Hague, Netherlands  
13th - 15th May 2026

**12:35 - 14.30- Project Visit**

**Visit Schildersbuurt neighbourhood and The De  
Constant Rebecqueplein/ Visiting the biggest Haag  
Wonen project**

**Group leaders City of the Hague and Haag Wonen**



**The Hague, Netherlands**  
13th - 15th May 2026