



Netherlands Enterprise Agency

Netherlands policy for local heating and cooling plans

Warsaw October 17th 2024

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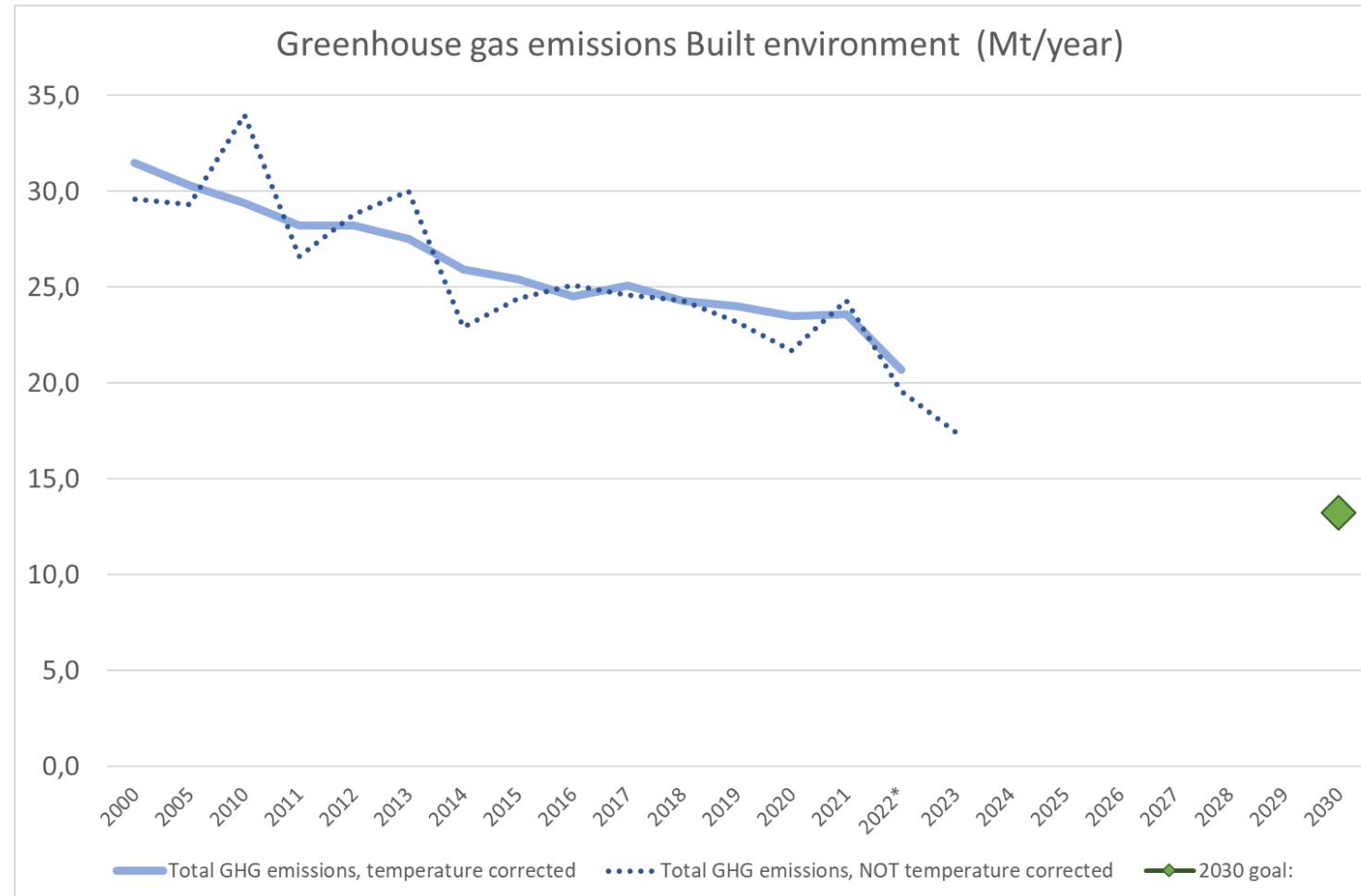


Overview

- > National policy PVGO
Acceleration program Sustainability measures in the built environment
- > NPLW: National Program Local Heat transition
- > Startanalysis
- > Heat map
- > Current status
- > Planning
 - Update heat plans
 - Regulation
 - Link with CBA EED art. 26



Emissions reduction goals built environment



**GOAL 2030:
13,2 MTON/YR**

(1990 -56%)

Current policies

PVGO: 'PROGRAMMA VERSNELLING VERDUURZAMING GEBOUWDE OMGEVING'

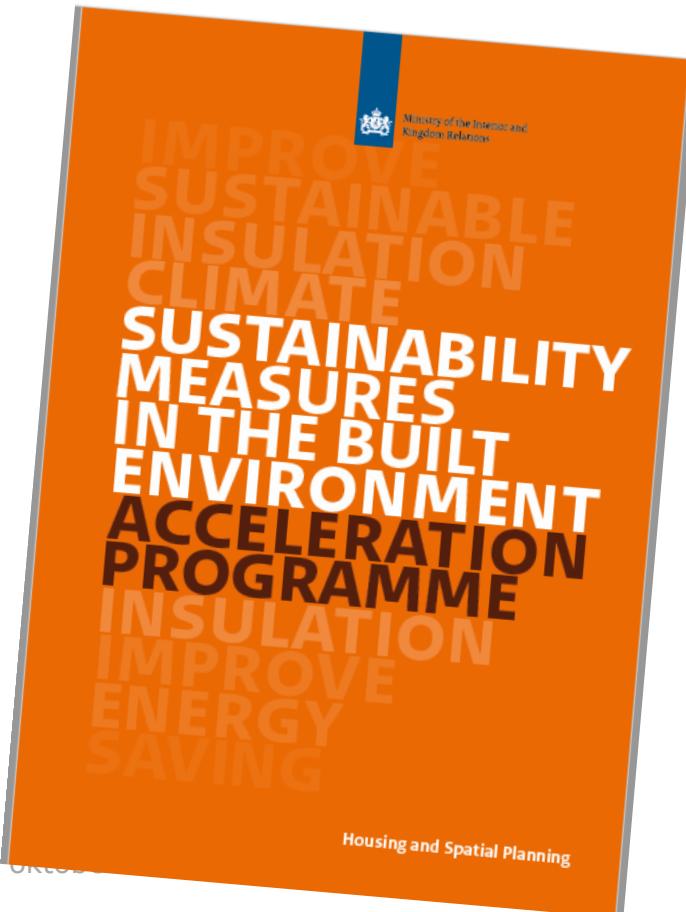
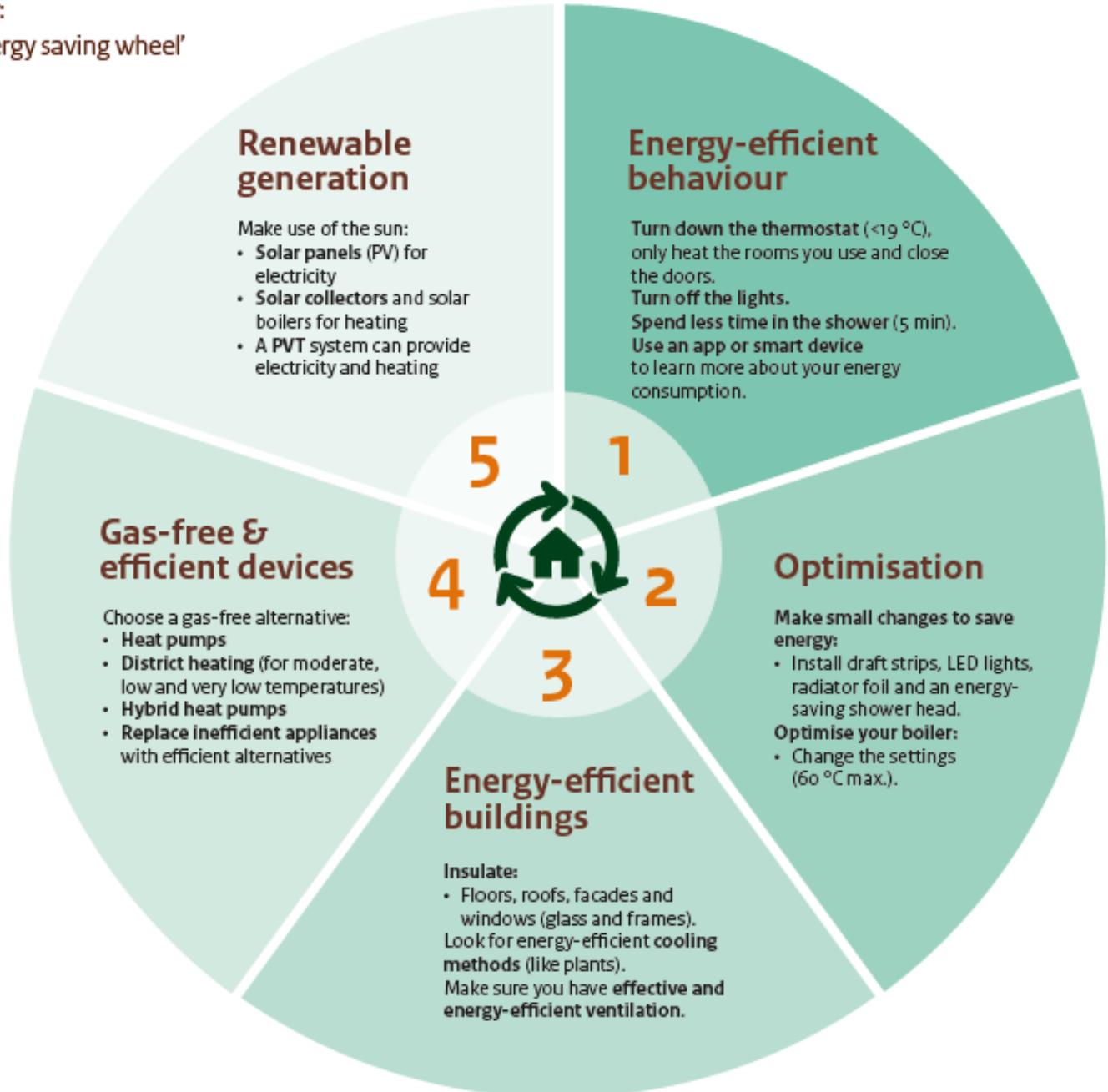


Figure 7:
the 'energy saving wheel'





National Strategy

- > Municipalities have the lead in the heat transition
- > Funding for municipalities
- > Starter motor are the housing corporations
- > New buildings are gas-free
- > National Insulation plan
- > Hybrid heat pump action plan
- > Pilot program for gas-free neighbourhoods
- > Financial support from 25 billion climate fund
- > New government continues the policy



NPLW

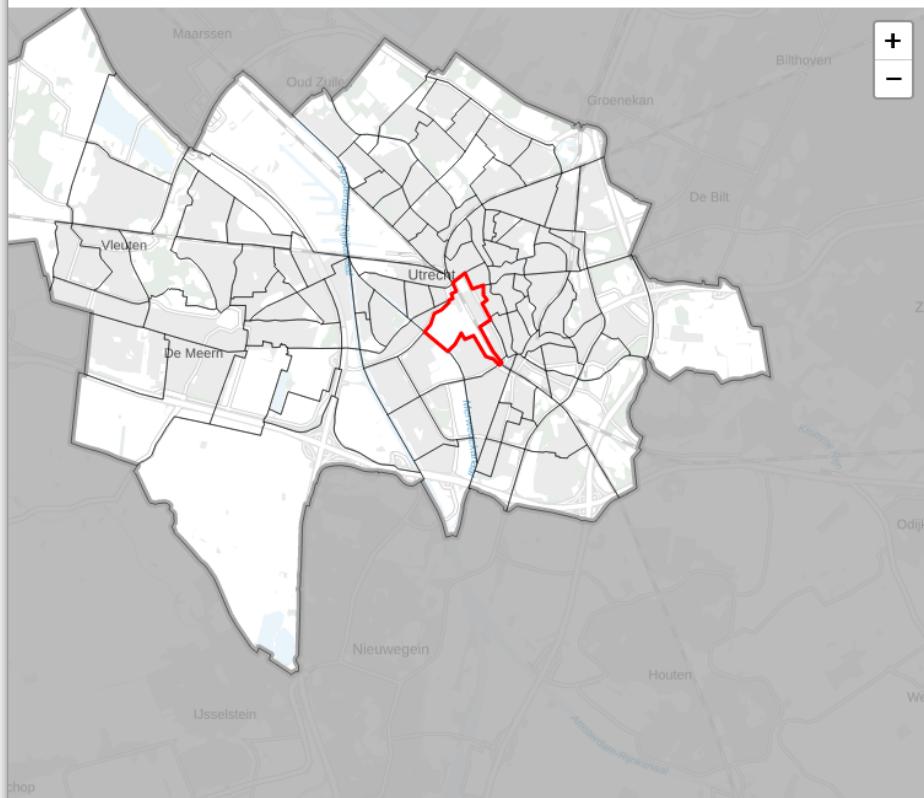
Nationaal
Programma
Lokale Warmtetransitie

- › Support for municipalities
- › Factsheets about technologies
- › Guidelines for the proces in the municipality and participation
- › Webinars and events
- › In cooperation with RVO



Start analysis: 5 strategies, 24 variants.

	S1	S2	S3	S4	S5
Infrastructure	Electricity	DH with MT-sources	DH with LT-sources	Green gas	Hydrogen
Insulation level of buildings					
Heat source or production	50°C Air-HP Ground-HP	>70°C Residual heat Geothermal sources Green gas for peak boiler	30, 50, 70°C Residual heat Water-HP Ground-HP Aquathermal H&C Storage	>70°C Hybrid-HP HR-boiler	>70°C Hybrid-HP HR-boiler



- S4 heeft de laagst berekende kosten, gevolgd door S3, S1, S5 en S2 met een verschil in kosten van respectievelijk 18, 28, 52 en 66 €/tonCO₂.
- Omdat het efficiënter is om de beperkt beschikbare hoeveelheid groengas in andere buurten te gebruiken, is voor deze buurt niet S4 maar S3 (de eerstvolgende goedkoopste strategie zonder gas) aangewezen als LN-strategie.
- 51% van de bebouwing in 'Hoog-Catharijne NS en Jaarbeurs' is reeds aangesloten op een warmtenet.

Hoofduitkomsten Kosten Gevoeligheidsanalyse MT bron LT bron Leaflet | Achtergrondkaart: PODOK

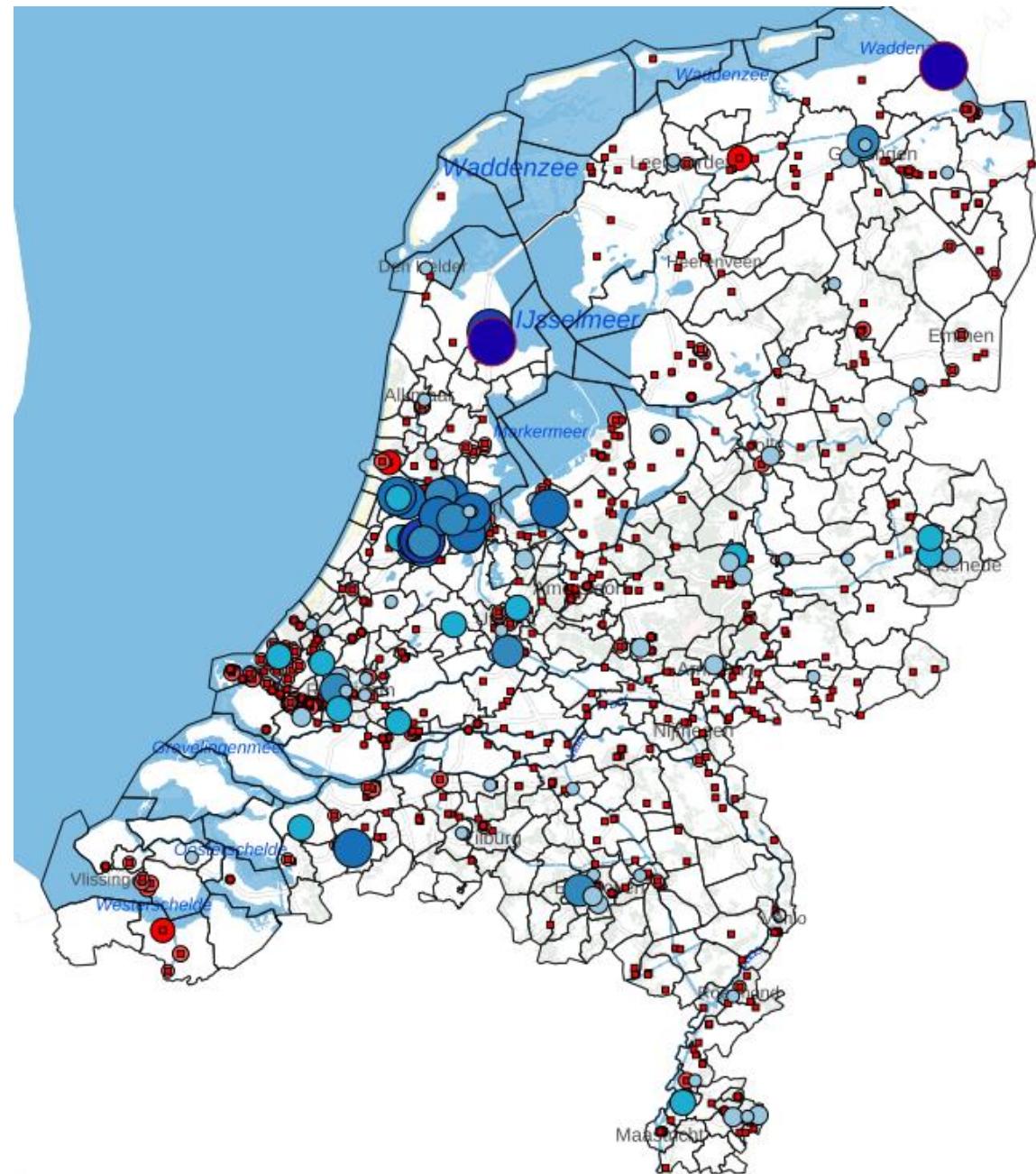
Hoog-Catharijne NS en Jaarbeurs		Dit resultaat is een startpunt voor nader onderzoek door gemeenten, geen advies.					Leaflet Achtergrondkaart: PODOK	
		S1b	S2e	S3f	S4d	S5d	Woningen (aantal): 842 Utiliteit (aantal): 584 Download buurttabellen	WEQ (aantal): 9453
Extra nationale kosten (€/ton CO ₂ -red.)		552	590	542	524	576		
Isolatienniveau variant		B+	D+	D+	D+	D+	Vrijstaand voor 1930	0.4
Aansluitingen (% van totaal)				40			2-onder-1-kap 1930-1945	6.8
Individuele elektrische warmtepomp		49	-	40			Rijwoning hoek 1946-1964	-
Middentemperatuur warmtenet		51	100	51	51	51	Rijwoning tussen 1965-1974	0.6
Lagetemperatuur warmtenet		-	-	9	-	-	Meergezins 1975-1991	46.7
Hybride warmtepomp met hernieuwbaar gas		-	-	-	-	-	Warmtevraag per hectare: 1992-2005	-
HR-ketel met hernieuwbaar gas		-	-	-	-	52: 1790 S3: 1786 (GJ/ha)	2006 - heden	45.6
Waarde groengas: lager							Waarde groengas: lager	
Labels (%)	A	B	C	D	E	F	G	
Afgemeld	31	33	5	5	2	-	1	
Voorlopig	7	12	-	-	1	-	3	

Start analysis

- > <https://themasites.pbl.nl/leidraad-warmte/2020/#>
- > The Vesta-MAIS model from PBL (NL environmental assessment agency)
- > Calculation for all 13600 neighborhoods from 342 municipalities
- > The national costs for 5 strategies
- > A lot of additional information
- > Update in 2024



Waste heat (data centers in blue)



Heat map

- › www.warmteatlas.nl
- › Energy use
- › Renewable energy sources
- › Waste heat
- › Data centers
- › Heat transition plans
- › District heating



Future

> New Collective Heat Act (WCW)

- Increasing public control over collective heat: **municipalities have the lead**
- New tariff rules and more transparency
- Ensuring consumer interests and security of supply
- Sustainability of collective heat

National Government

Tariff

Sustainability

Security of Supply

Municipality

Where?

When?

Who?

Heat Company

Construction

Operation

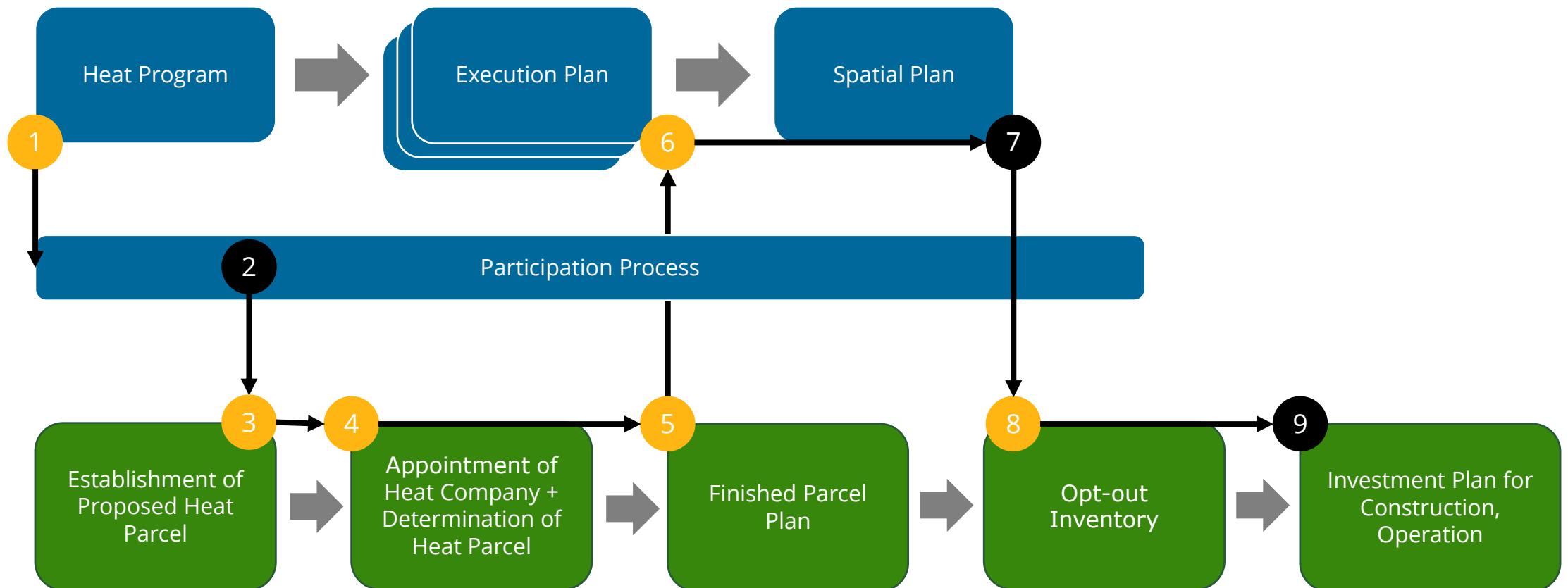
Parcel and
investment plan



Municipality in the lead

- > Decision on the sustainability strategy (1)
- > Establishes heat parcel (3)
- > Appoints heat company (4)

Initiates parcel plan and must approve (5)
Changes to the spatial plan (7)
Starts opt-out process (8)





CBA (Art. 26 6)

- › **CBA for Feasibility:**
Article 26 mandates a **CBA** to assess cost-effective integration of waste heat into heating systems.

- › **Supports LHCP:**
Helps municipalities identify sustainable and available heat sources for district networks.
(Heat Map)

