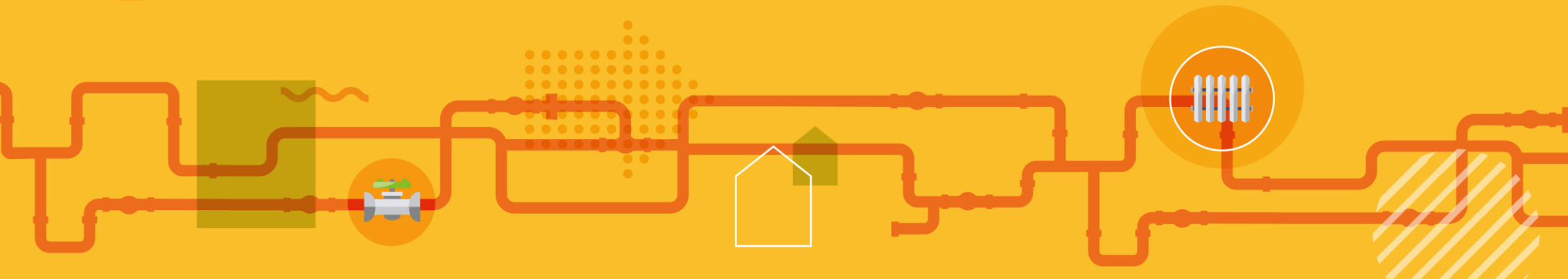


Heat strategy - MIDDELBURG

Winnie Versol – City of Middelburg
SHIFFT event 18/10/2021





Introducing... Middelburg, The Netherlands

- Population: 48,600
- Area (km²): 53 km²
- Country: Netherlands
- Capital of the province of Zeeland





- Historic town
- No. 7 town with listed buildings (1143)
- Tourism
- City near the sea and beaches
- *Oosterscheldekering* because we live below sea level.





Heat Strategy



Goal:
CO₂ reduction -
Middelburg in
2050 energy
neutral

**Built
environmen
t**

How?
Disconnecting
our buildings
from natural-gas

How/when?
Heat strategy





Vision, ambition and local heat policy

- **International** (The Paris Climate Agreement 2015)
- **National** (NL Energy Agreement 2013, Climate Agreement and Law 2019)
 - 49% CO₂ emission reduction by 2030 and 95% CO₂ reduction by 2050 (compared with 1990)
- **Regional:**
 - Energy Strategy (2020): RES Zeeland 1.0:
 - 2030: 34% CO₂ reduction in built environment (compared with 2017)
 - 2050: all buildings heated sustainable
 - Climate Adaptation Strategy (in development)





‘Making of’: Process and approach

- Partnership with 12 Municipalities to develop a Heat Strategy

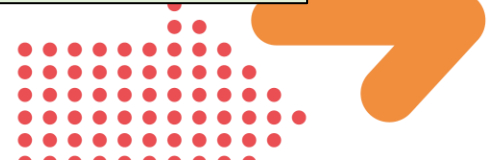
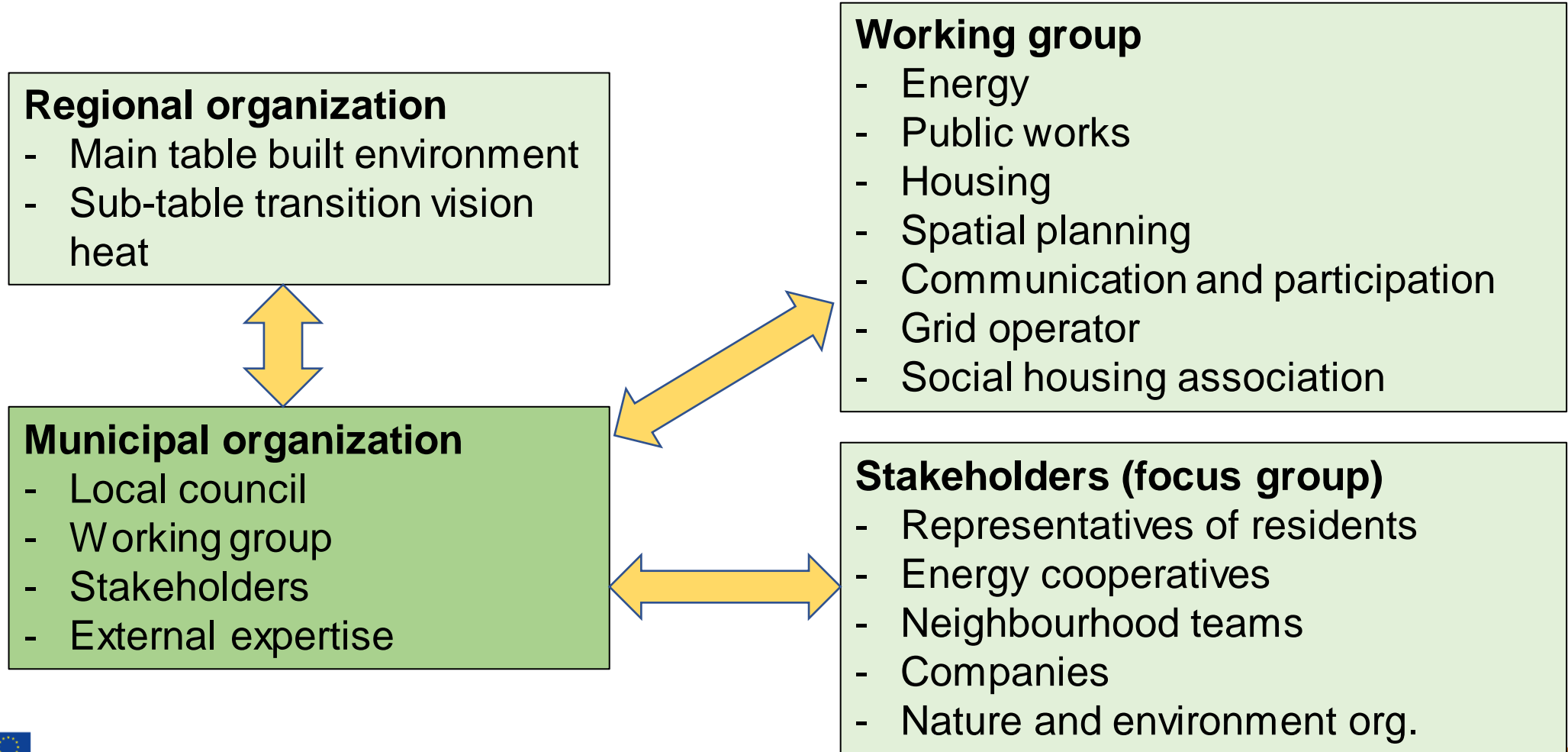


- 5 step approach: (1+2 common, 3-5 individual)
 1. Same assumptions / starting point
 2. Insight in heat solutions without natural gas
 3. District phasing and prioritising
 4. Implementation strategy
 5. Administrative decision-making





Governance model





Citizen and stakeholder engagement

- Survey (society and local council): what do you think is important?
- Focus group meetings with representatives of all neighbourhoods and other interested citizens.
- Information session (online)
- Presentations at neighbourhood meetings
- Communication activities focussed on informing, awareness and inspiration to take action





Vision, ambition and local heat policy

Heat Transition Map

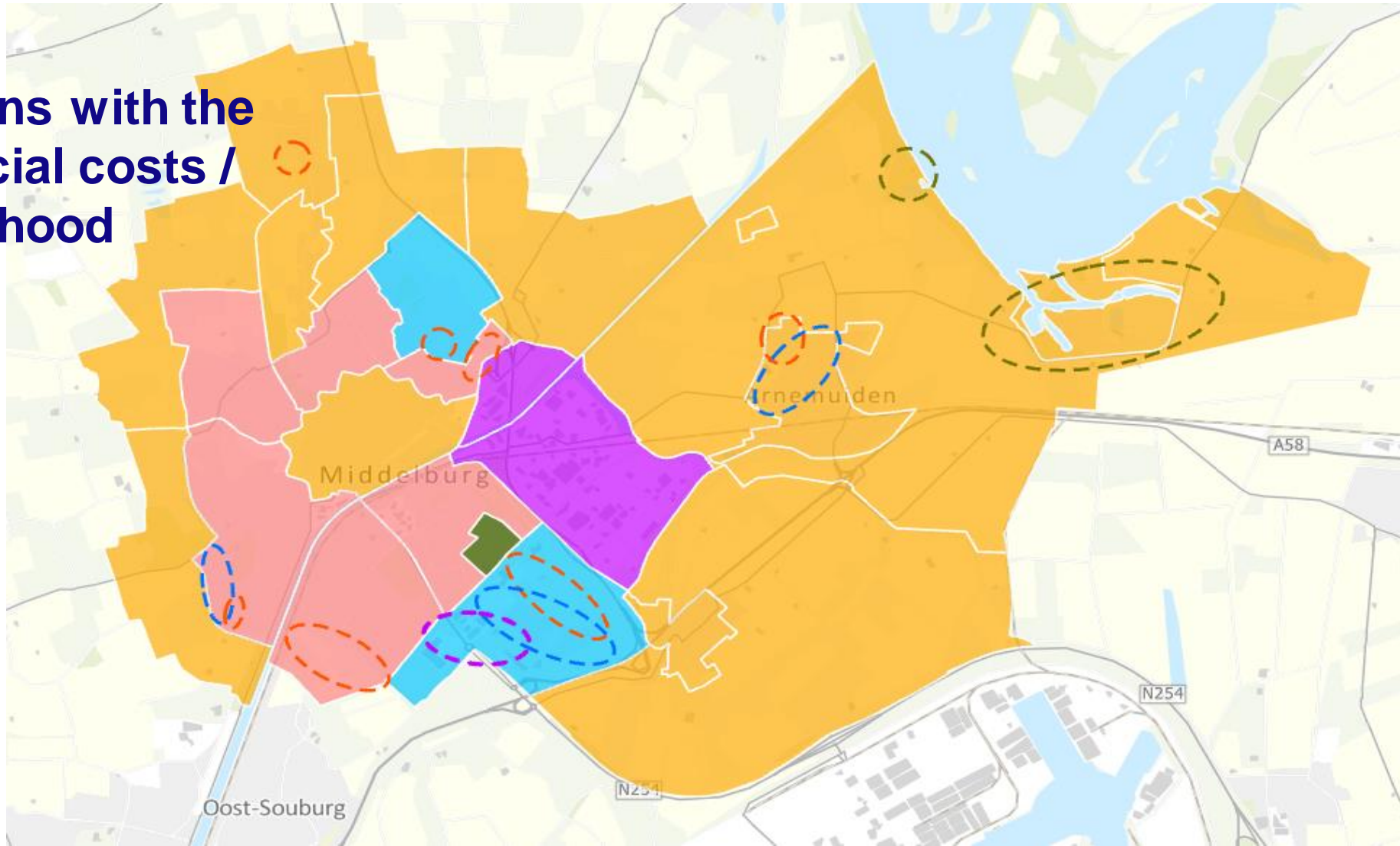
- The transition map shows a **transition path** for each area: which solution is in sight and which phases can be completed in the direction of a gas-free environment?
- The transition map is based on a solid foundation of **calculation models, data and analyses.**
- The transition map has been validated by the **local working group** of cooperation partners.





Heat transition map

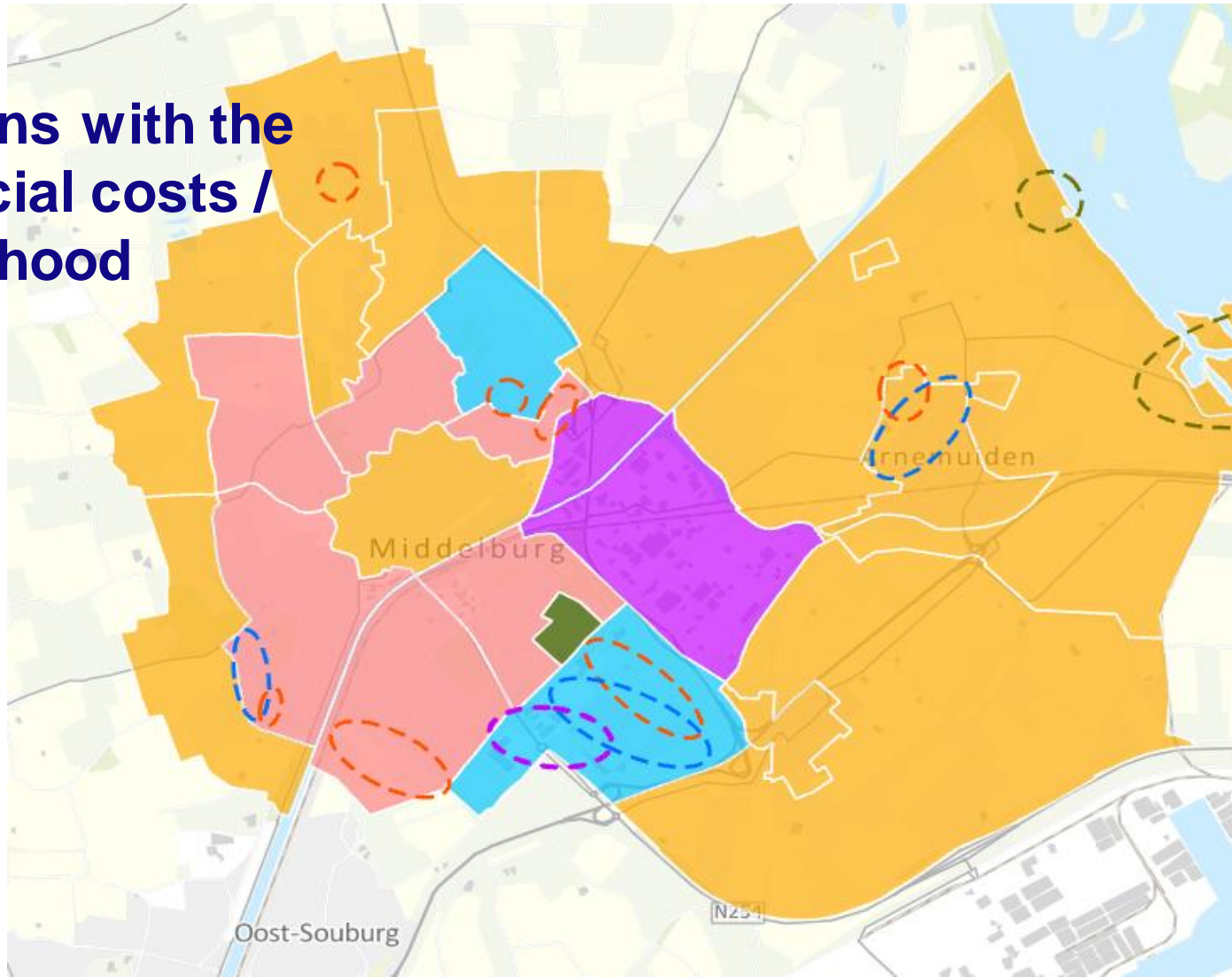
Heat options with the lowest social costs / neighbourhood





Heat transition map









Heat options with the lowest social costs / neighbourhood



Legend transition paths

General: save energy and become transition ready

Switch where possible at natural moments

-  *Hybrid: hybrid heatpumps with gas-free options where possible. Eventually remaining gas demand with sustainable gas.*
-  *Reconsider: locally natural gas free, otherwise hybrid. Regularly reconsider to explore new possibilities.*
-  *Proeftuin Dauwendaele (heat network)*
-  *All-electric: switch to all-electric at natural moments, targetgroup-oriented approach*
-  *Business area: individual and small-scale collective heat options for businesses.*
-  *Recreational real estate: tailor-made heat options for recreational real estate, such as infrared panels*
-  *Already gas-free*
-  *New construction site*



Next steps and actions

- Approval of the Heat Strategy by the City Council, dec. 2021.
- Development of the implementation strategy per neighbourhood or target group
- Performance agreements with the social housing corporation: all stock should have an average energy label B by 2020 and energy neutral by 2050
- Sustainable building counter (digital and telephone)
- Renovated house to zero energy as example
- Pilot Gas-free neighbourhood





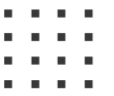
Key achievements and lessons-learned

Lessons-learned

To achieve the objectives in both RES and Climate Agreement, we must:

- Short-term focus on insulation and making buildings “natural gas-free ready” through **no-regret measures**.
- Search for opportunities to collaborate with other municipalities with similar target groups: collective communication and **joint purchasing** actions.
- Re-assess the strategy every 5 years, to take **innovations** and new insights on for example sustainable gas and sustainable heat sources into account.





Key achievements and lessons-learned

- Key challenges
 - How do we get the residents on board?
 - How do we motivate residents to take action
- Key achievements
 - Cooperation with 12 neighbour municipalities
 - Regional estate agent for heat sources: development of a Regional Structure Heat

