



Cities & the Renovation Wave

Impactful District-Level Approaches



Wednesday September 9, 2020



Giulia Forgnone

Policy Officer at
Euroheat & Power

The Renovation Wave what's in it for the local level?





The Celsius Initiative

- a European project that lives on -





Celsius: a demand-driven collaboration hub



- ✓ Continuous **knowledge sharing** through the newsletter, webinars, workshops and the Celsius Toolbox.
- ✓ **Hands-on support for cities** through the forerunner groups.
- ✓ Influencing European **policy**.
- ✓ Support **innovation, replication and scaling** of pilots and demonstrators.



celsius



Cities & the Renovation Wave
Impactful District-Level Approaches



The Renovation Wave – what's in it for the local level?



Giulia Forgnone

Policy Officer at
Euroheat & Power

Moderator



Karlis Goldstein

Energy Efficiency Adviser to
Energy Commissioner Kadri Simson
DG ENERGY



Edward James-Smith

Energy Counsellor at the
Permanent Representation of
Denmark to the European Union



Renée Bruel

Head of Buildings Programme at the
European Climate Foundation



Susana Paardekooper

PhD Fellow
Aalborg University



Karlis Goldstein

Energy Efficiency Adviser to
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DG ENERGY

Overview of the Commission's work on the Renovation Wave





Edward James-Smith

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What are member states
expecting from this
initiative?





Renée Bruel

Head of Buildings Programme at the
European Climate Foundation

Key findings of the European Climate Foundation Zero Carbon Buildings Report





Zero carbon Buildings 2050 report

Renée Bruel, European Climate Foundation

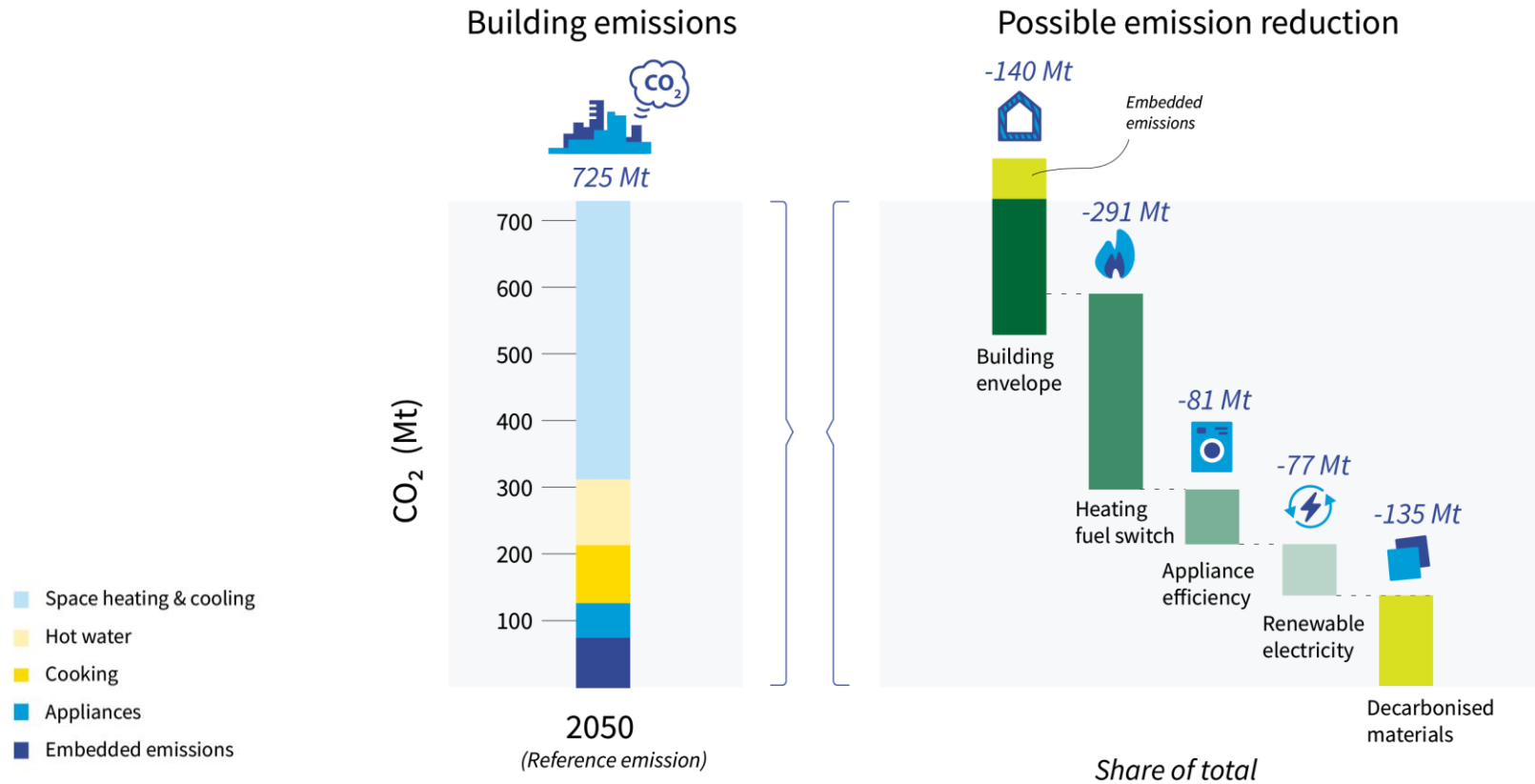
Celsius webinar *“Cities & the Renovation
Wave: Impactful District-Level Approaches”*

9 September 2020



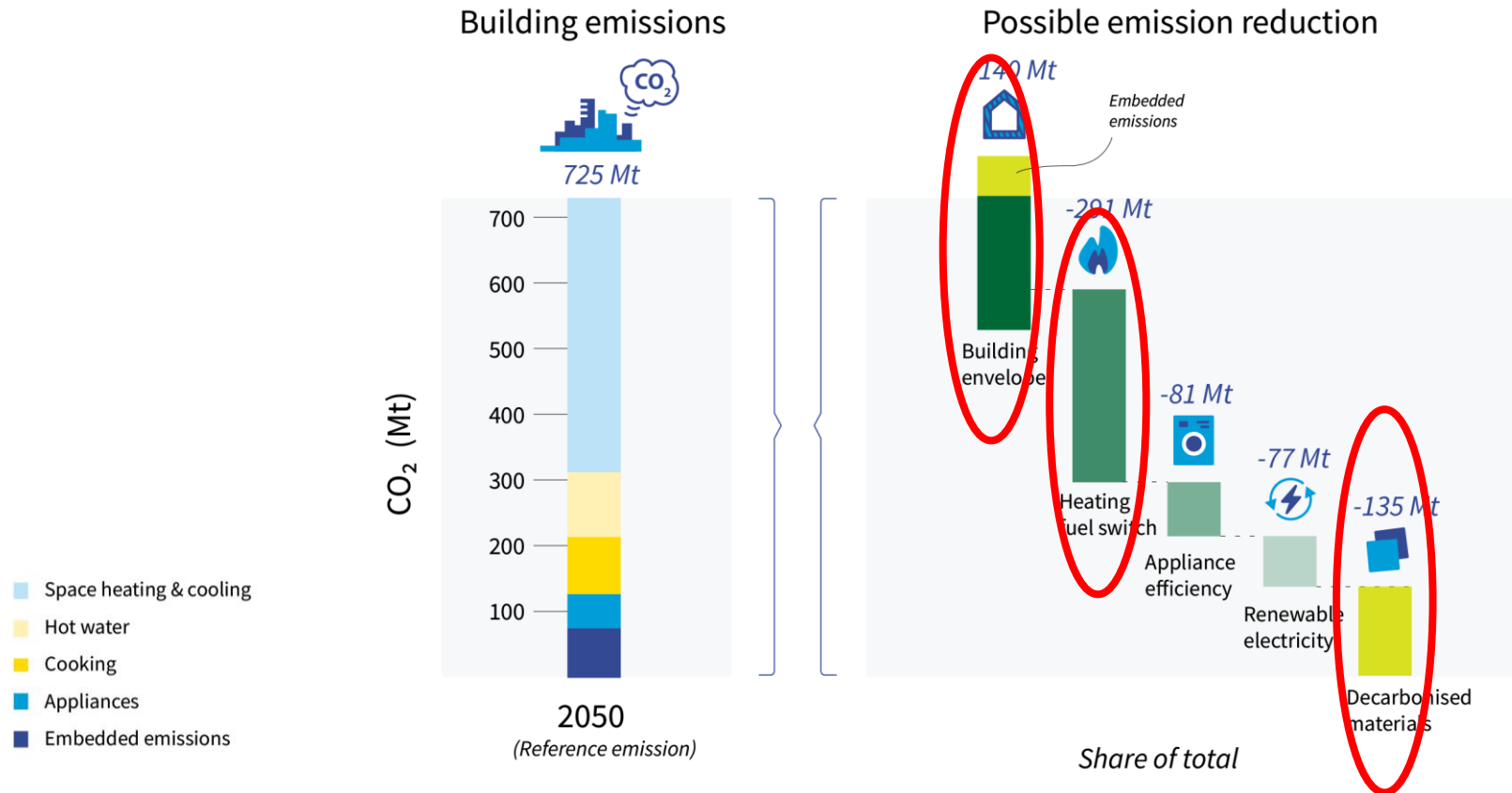
European
Climate
Foundation

Reduction of emissions in building sector requires measures across all areas



References:
European Commission, 2016
Röck, 2020
Analysis with EUcalc model by Climact

Reduction of emissions in building sector requires measures across all areas



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Main policy gaps in building envelope and heating fuel switch policies

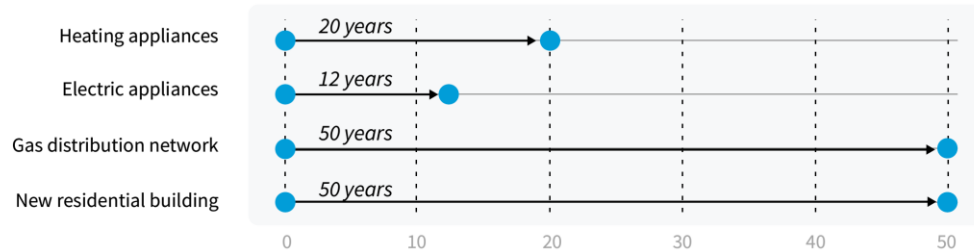


	Building envelope	Heating fuel switch	Appliances	Electricity	Building materials
Existing policy	Performance requirements for new buildings and major renovations	Efficiency requirement for heating appliances	Efficiency requirements for new appliances	Cap on emissions (ETS)	Cap on emissions from ETS sectors
Gaps	Performance requirements for existing buildings	Cap on emissions for heating fuels; Obligation/ban of fossil fuel heating systems; Ban on fossil fuel in new built			Lifecycle emissions requirements

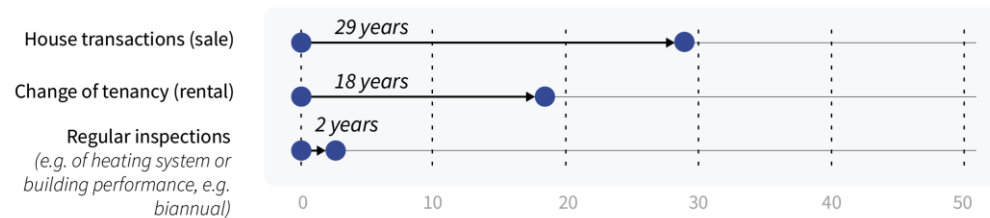
One, maybe two investment cycles until 2050



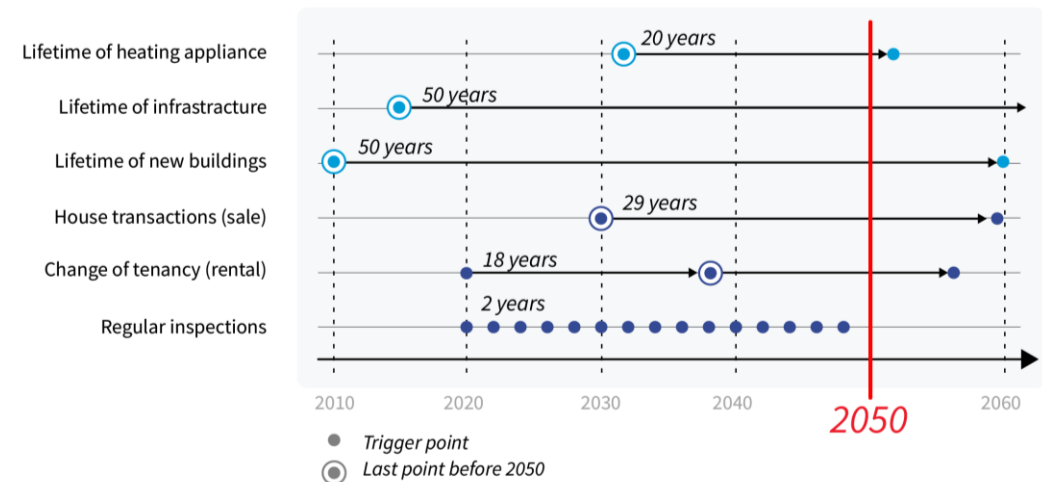
I. Economic lifetime of investments



II. Trigger points for renovation



III. Timeline of investment moments



Policy recommendations



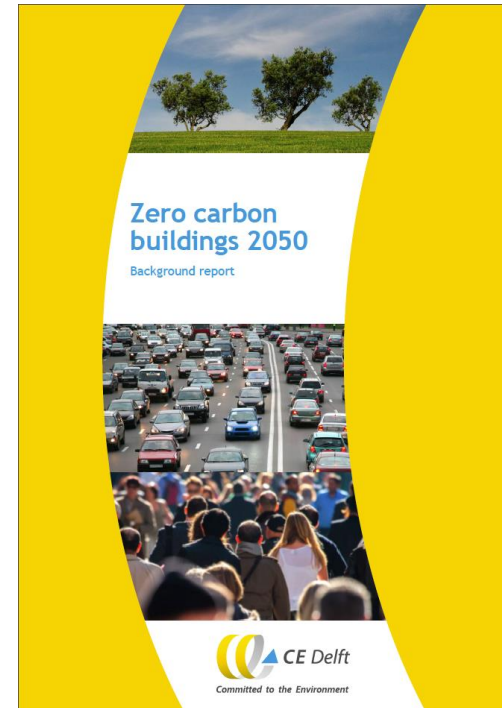
- Buildings envelope
 - Introduce Minimum Energy Performance Requirements at point of sale, change of tenant and at fixed moments
- Heating fuel switch
 - Ban on fossil fuels for use in new buildings
 - Phase out new fossil fuel heating systems over time
 - Cap on CO₂ emissions of energy carriers for retail energy suppliers
 - Local or regional heating plans to implement electrification of heating and district heating
- Supporting policies
 - Financial support to accelerate change and alleviate energy poverty
 - One stop shops for citizens & technical assistance for municipalities

Zero Carbon Buildings 2050 report



<https://europeanclimate.org/resources/bringing-buildings-on-track-to-reach-zero-carbon-by-2050/>

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Susana Paardekooper

PhD Fellow

Aalborg University

Local aspects to synergies between renovations and heat supply



Discussion:

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PAUSE



Local district-level approaches and needs for the Renovation Wave



Sofia Lettenbichler

Policy & Projects Manager

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Moderator



Britt Verhesen

Energy Project Leader at

City of Antwerp



Tomislav Novosel

Project Manager at
North West Croatia
Regional Energy Agency (REGEA)



Maya van der Steenhoven

expert in heat transition
in the Netherlands



Adrian Hiel

EU Policy & Communications at
Energy Cities



Sofia Lettenbichler

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Impactful District-Level Approaches





Britt Verhesen

Energy Project Leader at
City of Antwerp

District-Level heat planning in Antwerp



Antwerp case: district-level heat planning



- Heat zoning plan: district approach
- Action plan district heating
 - 9 pilot zones
 - Towards investment decision
 - Strategic partners
- Combination of measures

➔ GOAL = CO2 reduction 



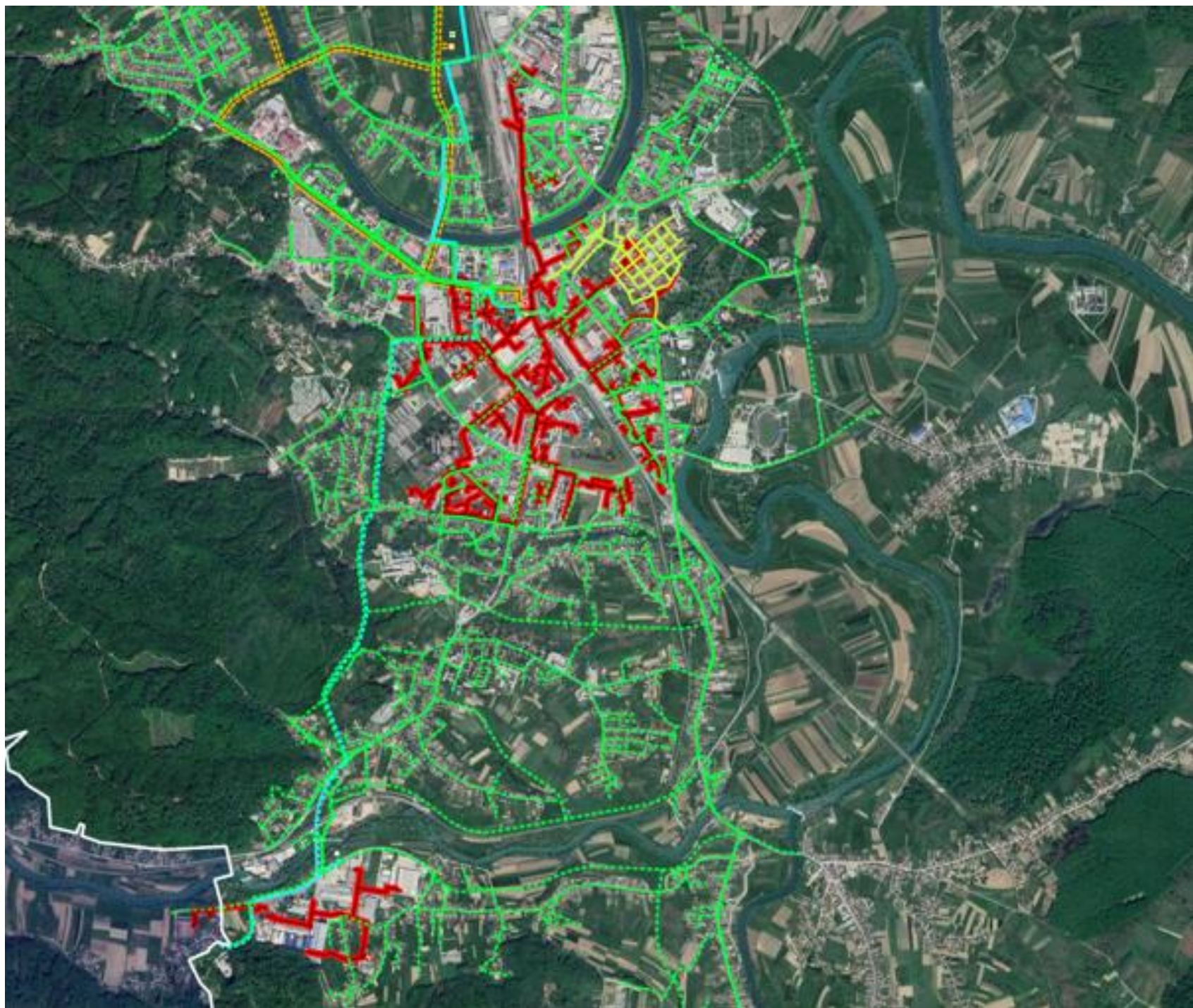


Tomislav Novosel

Project Manager at
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Regional Energy Agency (REGEA)

Energy and climate planning in the city of Karlovac, Croatia



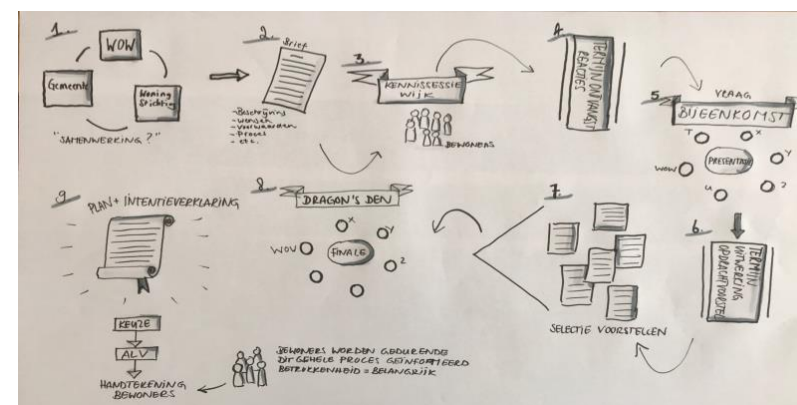




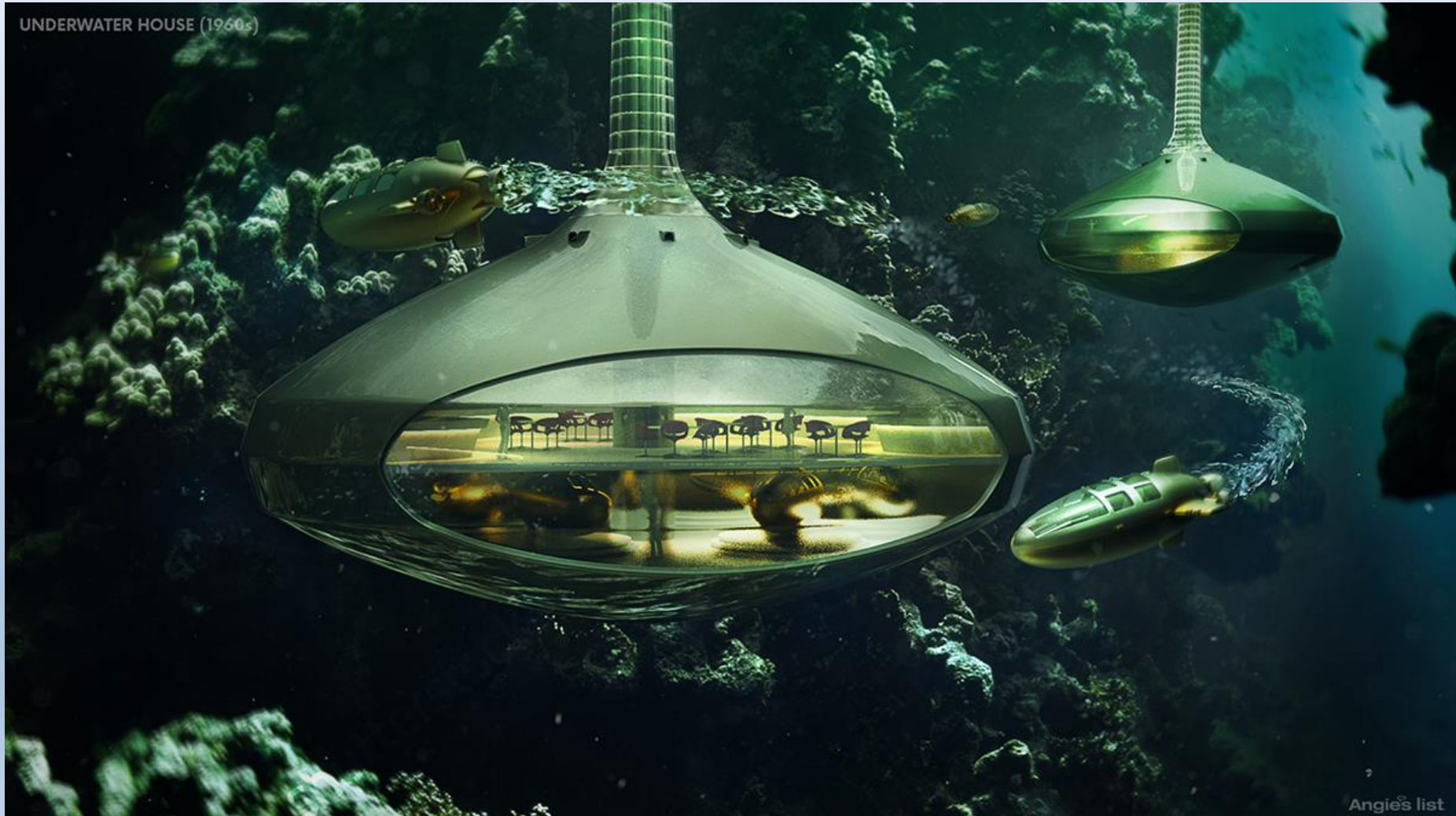
Maya van der Steenhoven

Expert in Heat Transition
in the Netherlands

Renewable Heating and Cooling from the Dutch Perspective

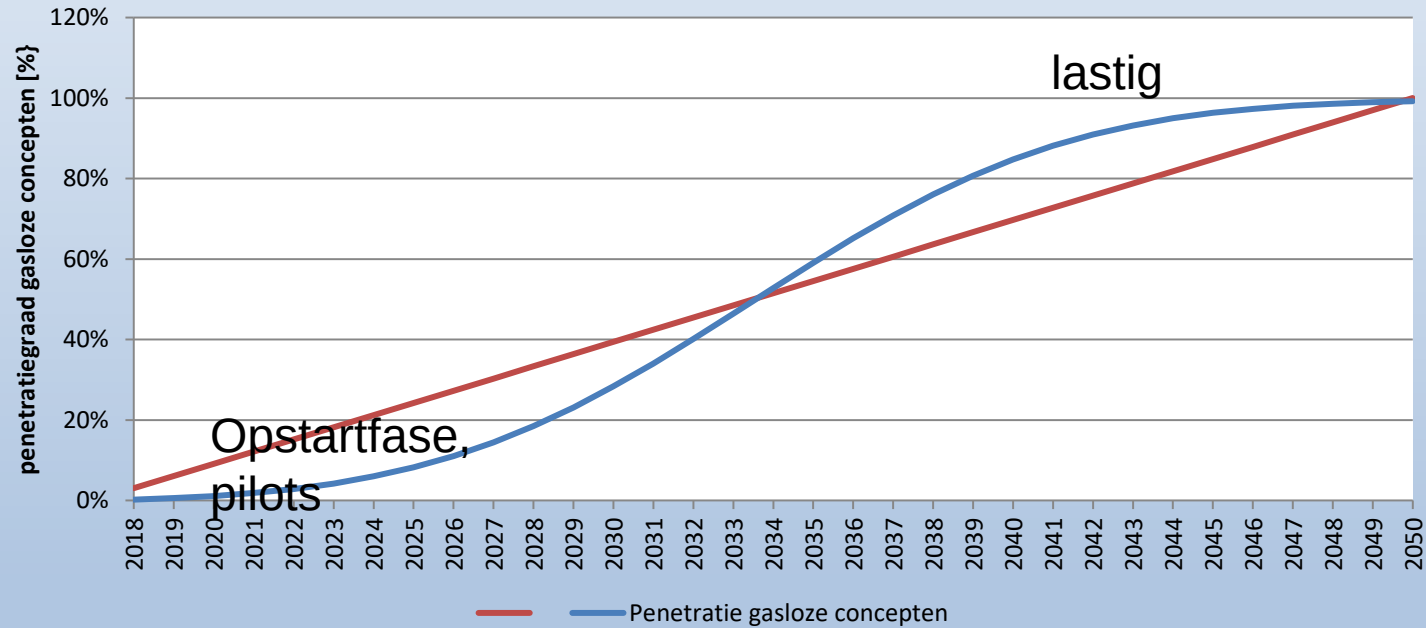


Renewable Heating and Cooling from the Dutch Perspective



Houses of the Future - According to the Past - 1960 view on 2000

9 million buildings without gas in 2050



Climate Deal: buildings

Neighbourhood oriented approach

Fast begin

Until 2021 fast start by social housing corporations and new buildings

Until 2021 local planning in city energy plans focused on neighbourhoods

Implementation

After 2021 step by step rollout sustainability in neighbourhoods

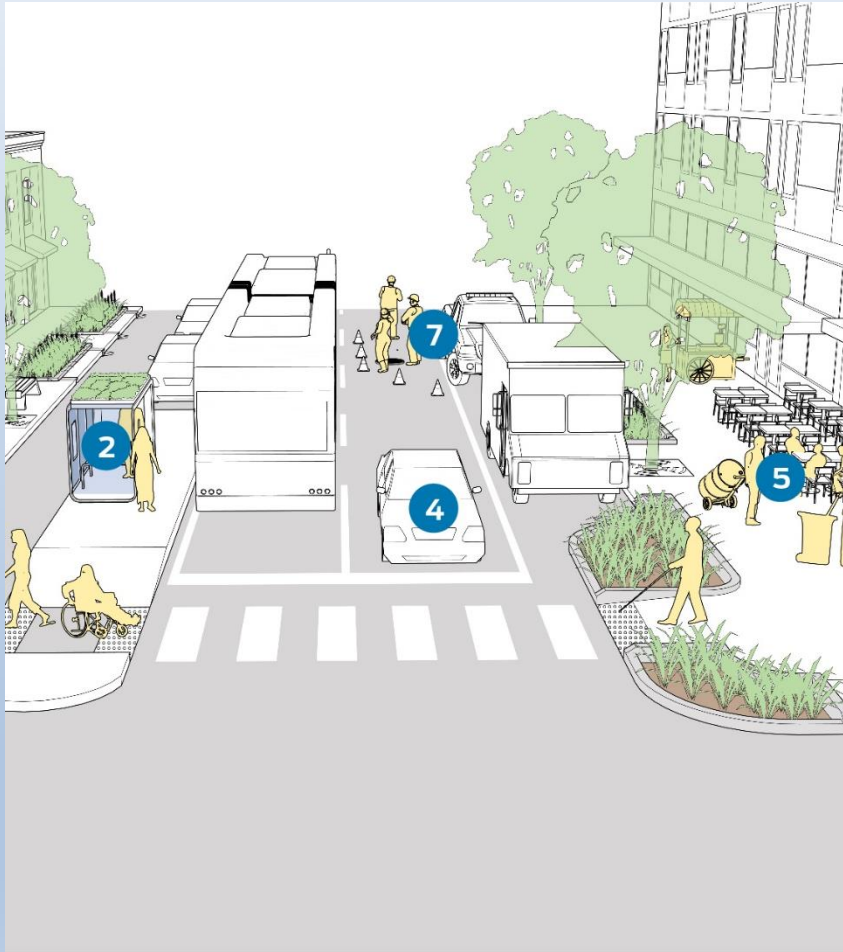


Biggest transition of the century challenges in everything

- Technology and systems
- Spatially
- Infrastructure
- Businessmodel
- Legislation and regulation
- Human nature/societal
- Municipalities don't lack big ambitions but they lack people, knowledge, experience, skills, budget



What can municipalities do?



- Make sure you involve people in the “Regional energy strategy” RES and Heat vision.
- The heatvision includes local heat sources and temperatures
- Build on coalitions of the willing
- Start with the social housing corporations and learn from pilots
- Facilitate local groups with first steps to get more enthusiasm
- Make the issue broader: a **HEALTHY** local place to live



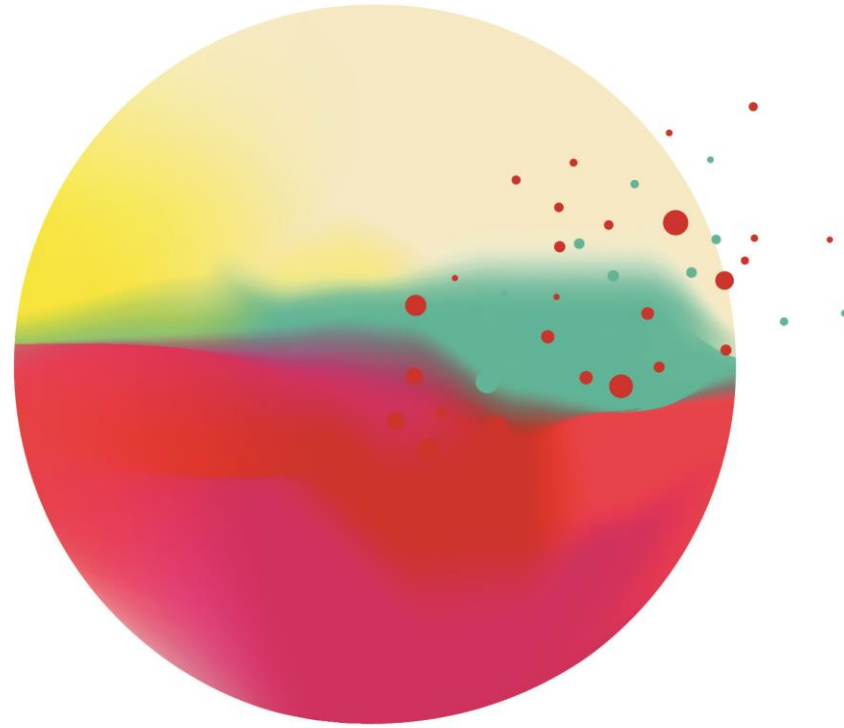
Adrian Hiel

EU Policy & Communications at
Energy Cities

A district-level approach to the Green Deal and the Renovation Wave



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**A District-level
approach**

Green Deal

**The Renovation
Wave**



Green Deal means massive transformation for towns and cities

- Biodiversity 2030 Strategy
- Sustainable and Smart Mobility Strategy
- Fit for the Digital Age
- 'Farm to Fork' Strategy
- Forest Strategy
- Smart Sector Integration
- Renovation Wave



No single Renovation Wave – but lots of smaller ones!

- Mapping Heat and Mobility
- 15 minute city – incorporating building use change into the Renovation Wave
- Different sectors need different levers and have different timelines
 - Quick wins: school, social housing, municipal buildings
 - Important kick-start of community energy projects
- Commercial buildings – aggressive increase in standards
- Single-family dwellings and condominiums – difficult to scale and long timeframes

Discussion:

Local district-level approaches and needs for the Renovation Wave



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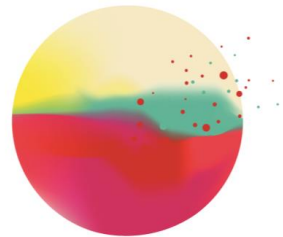
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Thank you!

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Ministry of Foreign Affairs of Denmark