

CASE STUDY

PRIVATE HOMES IN
SOUTH DENMARK



SUMMARY

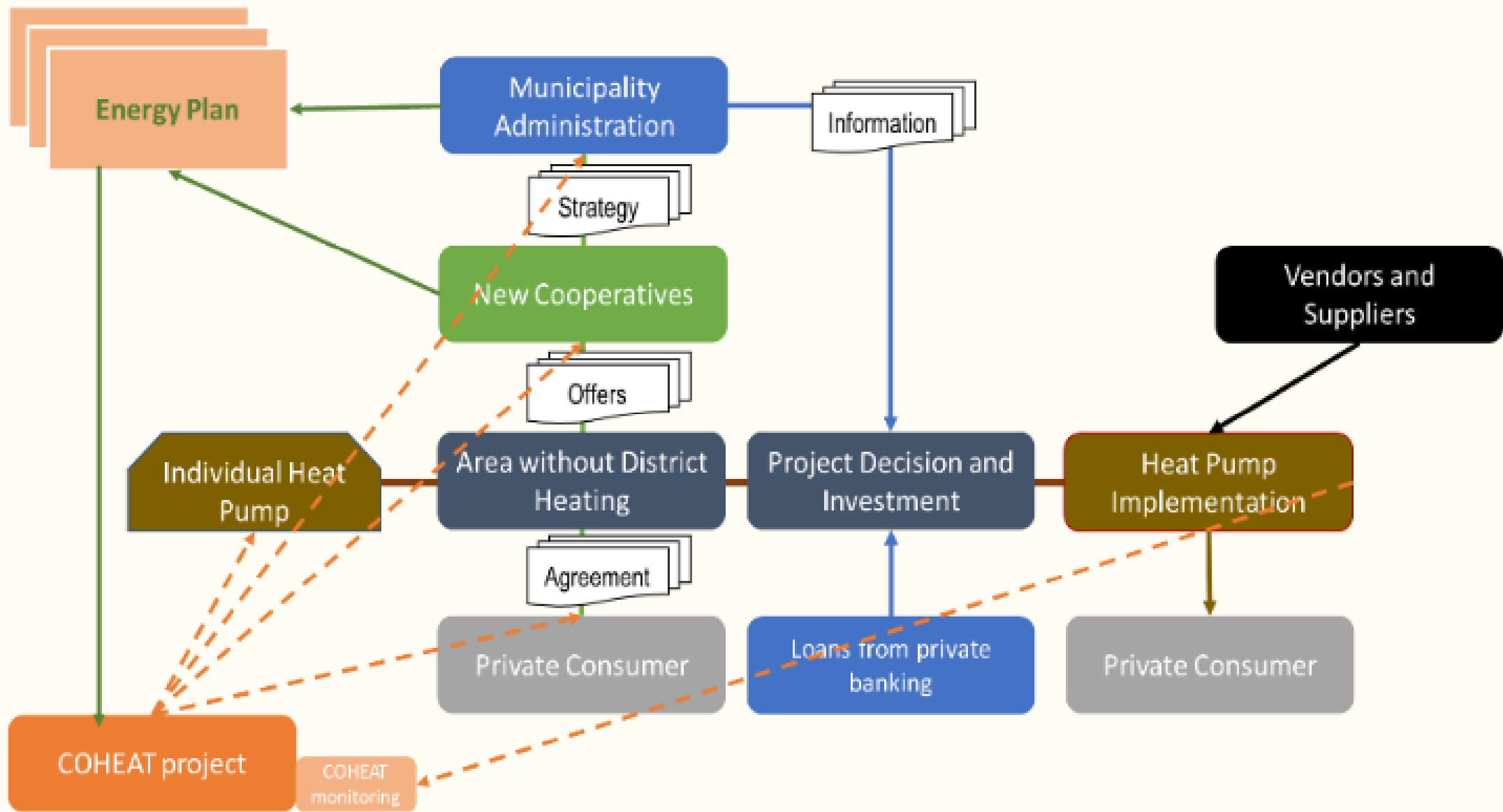
The Region of Southern Denmark (RSD) comprise 22 municipalities, with a total population of around 1.2 million people. Due to the enabling of RoundBaltic seven of the municipalities committed to run one-stop-shops as a key initiative named COHEAT in fulfilling the region's ambition of reducing greenhouse gas emissions by 70% by 2030.

The case study represents a unique approach of combining energy renovation with a conversion to green heat supply of private homes.

The one-stop-shops are to be driving force in generating concrete sustainable investments through novel business, technology and replication models.

A key step in the process has been to undertake heat planning to designate areas suitable for different forms for green heating and energy renovations according to rational criteria. This is to be supplemented with campaigns and involvement of the financial sector towards the homeowners.





CONTEXT

Roundtables under RoundBaltic helped to gather the relevant stakeholders aiming to realise the ambitions behind the initiative. It is pioneer in joining stakeholders of the heat supply sector, incl. the established district heating sector, actors involved in energy renovations, financial sector in addition to regional and local authorities. The consultations and discussions made clear that the local authorities are seen trustworthy on the side of homeowners and hence the natural anchor point of the one-stop-shops. The roundtables helped to clarify what expertise are required to deliver competent services, incl. upscaling existing experiences in especially the municipality Sonderborg and their Project Zero initiative.

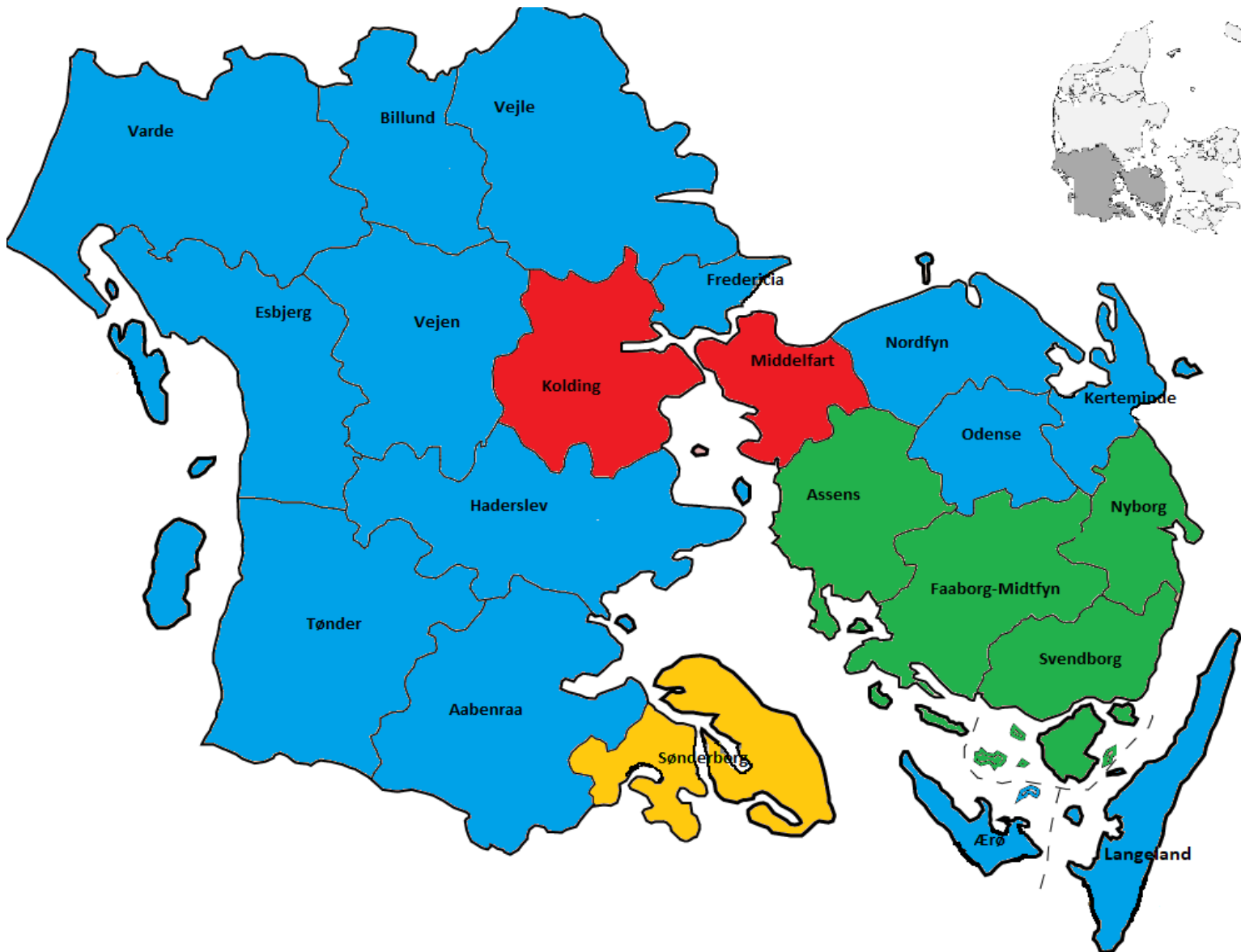
Via the roundtables RoundBaltic succeeded in fostering the COHEAT initiative and gaining the momentum of the stakeholders across the disciplines. Realising the ambitions require additional resources and with the regional authority as lead partner managed to obtain resources from the EU LIFE PDA Programme to turn the ambitions into real investments



ENABLING EFFORTS

Following discussion at the regional roundtable under RoundBaltic, 21st Sept 2021, and subsequent stakeholder consultations the COHEAT initiative comprises the following key characteristics:

- 7 out of the 22 municipalities in the Region of Southern Denmark commit to become ‘investing’ municipalities that want to be part of enabling structures for energy renovation and conversion to green heat of private homes. The intention is to organise this in three project development units/PDU (one-stop-shops), as illustrated on the map below:
- Within these one-stop-shop structures the intention is to mobilise citizens and more specifically the homeowners to take decisions on and helping to implement green investment solutions. COHEAT will, based on the experience that has been gained nationally and EU-wide, do a dedicated effort to engage citizens/houseowners and guide them through the investment process aiming for sustainable and otherwise qualified green investments. Local energy plans are to lead the process accompanied by appropriate marketing strategies.
- The other 15 municipalities in RSD have expressed interest in learning of the COHEAT activities and replicate the concepts and good practice of relevance for their ambitions.
- COHEAT will be implemented according to the energy efficiency first principle entailing that the conversion of oil and gas boilers to heat pumps – a leading trend in Denmark due to the policy goal of phasing out oil and gas boilers until 2030 - will be combined with energy renovation of buildings. So far most of the conversion is promoted without the energy efficiency dimension and the COHEAT initiative is essential to avoid that the Energy Efficiency First principle is being missed in the conversion process.



Region of Southern Denmark

Population: 1.223.105

Area: 12.262 km²

Municipalities: 22

Investing municipalities:

PDU 1: Middelfart and Kolding

PDU 2: Assens, Faaborg-Midtfyn, Svendborg and Nyborg

PDU 3: Sønderborg

Replication municipalities:

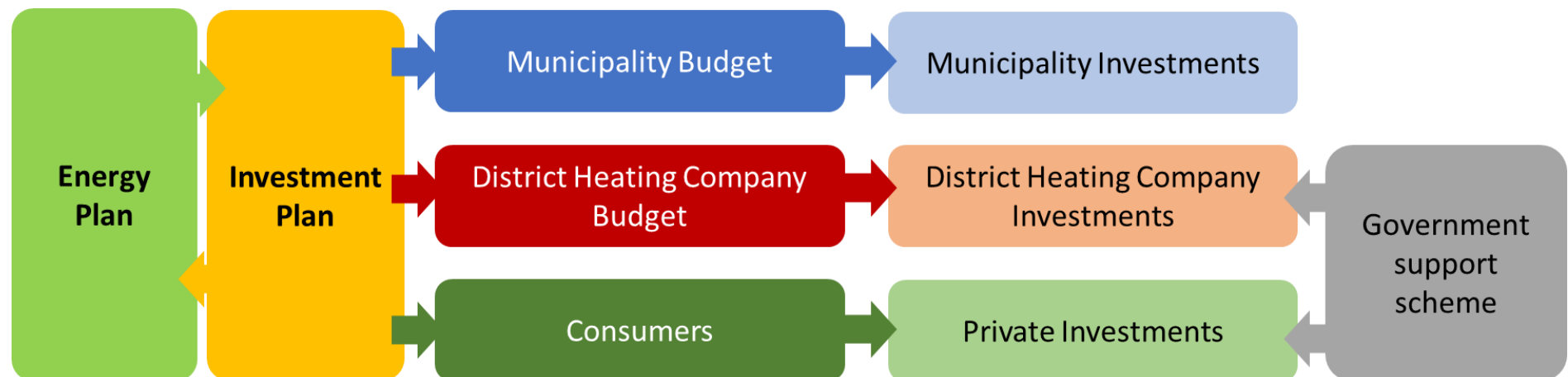
Tønder, Haderslev, Aabenraa, Esbjerg, Varde, Fanø, Billund, Vejen, Vejle, Fredericia, Odense, Nordfyn, Ærø, Kerteminde and Langeland

APPROACH

The approach to enabling the green heat and energy renovations solutions is the following:

- A local Energy Plan – driven by the municipalities and the district heating companies and in accordance with the local SECAP/SEAP and related provisions. This energy plan is to pave way for the most rational green investment solutions.
- A local Information Plan – to ensure that all types of potential customers are being informed and empowered to take action.

- A local Investment Plan – to facilitate decision on the business plan.
- The Danish Government runs a support scheme with subsidies for Danish households to undertake energy renovations and conversion to green heat supply that give stimulus to the COHEAT initiative.
- The process from energy plan to investment plan in interaction between municipality, local district heating company and consumers/houseowners is illustrated in the figure below:



RESULTS

The effort has resulted in the creation of 7 municipal anchored one-stop-shops committed to generate private investments in green heating and energy renovations for 32 MEUR.

Implementation of these investments will result in

- **6,742 tons of CO2 reductions,**
- **37,477 MWh of energy savings**

- Put in place one-stop-shop structures in the Region of Southern Denmark as driver of energy renovation and green heat solutions for private homes.
- The one-stop-shops in the 7 municipalities will start their operations from year 2023 in accordance with the concepts shaped under RoundBaltic and developed in detail under the EU LIFE PDA Programme.
- This entails there will be promoted different type of green heating and energy renovation investments in accordance with a heat planning process. Monitoring will be put in place to follow and document the investments as they progress.
- Inspiring other municipalities/utilities in RSD and other parts of Denmark/EU to opt for the COHEAT solution.

INVOLVING THE FINANCIAL SECTOR

Involvement of the financing sector is key to financing the green investments in the private homes.

The Project Zero initiative in Sonderborg, entailing a goal of net-zero emissions by 2029 for a municipality with a population of approx. 75,000 inhabitants, has already been interacting with banks on targeting homeowners for several years.

With the intention of upscaling this experience, Morten Vestergaard, Vice-Director at Broager Sparekasse, shared their experience at a RoundBaltic roundtable, 22th Sept. 2022.

He reported that the cooperation under the Project Zero initiative has been a great success due to these factors:

- Homeowners in Sonderborg meet a similar approach, regardless of bank
- It has boosted the speed of renovations
- It has led to higher earnings for the banks and lower expenses for the home owners
- All together a 'win-win' situation

The seven municipal anchored one-stop-shops under COHEAT are doing efforts to engage local banks with similar intentions as under Project Zero.

So far, the consultations are going well with the sincere hope that banks can be engaged as a key element in realising the intended green investments.

LESSONS LEARNED

A key lesson to be learnt from the Project Zero initiative and the upscaling under COHEAT, facilitated by RoundBaltic, is that municipalities are appropriate bodies to run one-stop-shops as driver of green heating and energy renovations of private homes. Among other stakeholders this is appreciated by banks that can use the one-stop-shops as platforms to fulfil their intentions of increasing green loans.

The further journey on developing green business models under the one-stop-shops will evidently provide additional learning allowing for further upscaling to other municipalities.

It is a clear ambition of the regional authority to help replicating the results of COHEAT throughout the region.



“As regional authority we are very happy that 7 municipalities committed to run one-stop-shops for private homes and will do our best to make COHEAT a successful initiative, incl. replicating the concept in the other 15 municipalities in the region.”

*Anders Bræstrup, Development Consultant,
the regional authority of South Denmark.*

CONTACT

Anders Bræstrup, Development Consultant, Region of Southern Denmark

atb@rsyd.dk

www.coheat.eu

Disclaimer

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This Case Study was elaborated as part of the RoundBaltic project bringing together representatives of the financial and energy efficiency sectors at regional and national roundtables to discuss and find solutions to the challenge of energy efficiency finance in the three target countries Poland, Latvia and Denmark.

Key focus areas have been to ensure an investment friendly framework along designing of financing instruments in accordance with the EU financial pillars more effective use of public funds, aggregation and project development assistance and de-risking.



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