







ProjectZero is an enabler for Sonderborg to become a **ZEROcarbon community** by 2029, based on sustainable growth and creating new **Green jobs**

20 years ahead of a fossil free Denmark

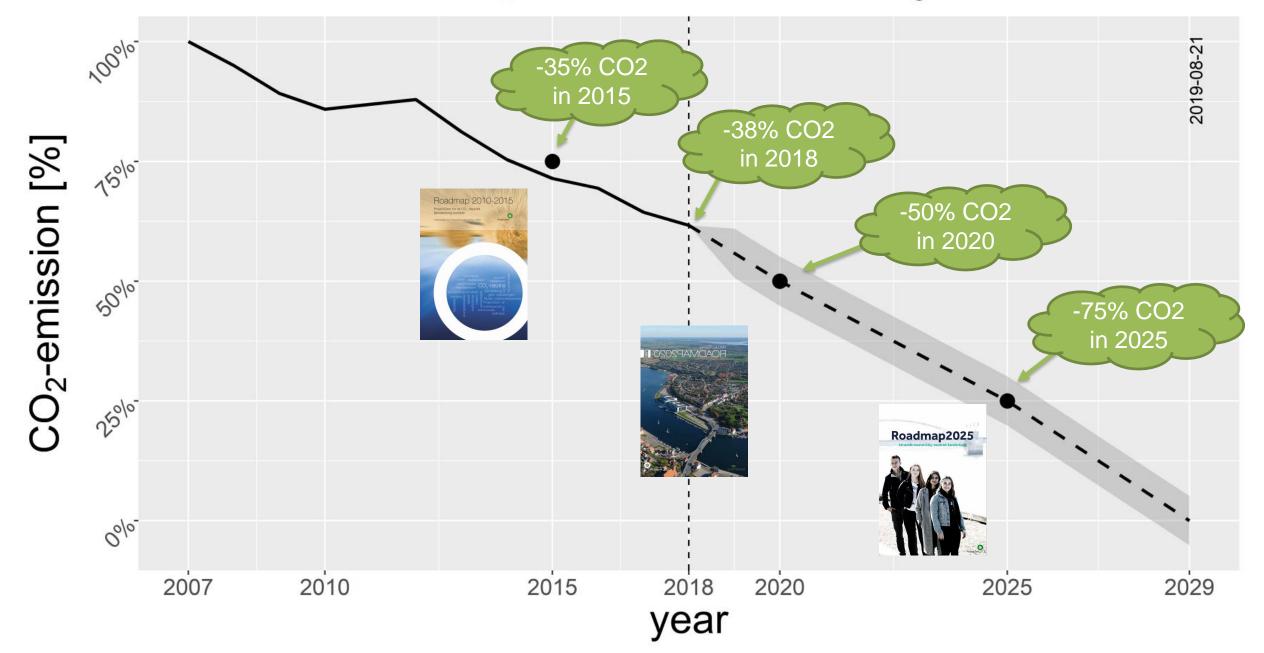
Our approach is holistic and include Public Private Partnership, technology, solutions, business, participation ... and a new thinking!







CO₂-reductions in Sonderborg





Major Achievements

- 1,600 homes visited by Charlie
- 65% have initiated retrofit with average €21,000 generating €15 mio in craftsmen sales
- Energy savings up to 45% per household
- 65% of local craftsmen has been trained in energy consulting- and solutions
- Over 50% of all local shops is a part of ZEROshop
- Energysavings up to 60%
- Local partnership whit craftmen
- Biogas plant in progress
- PV-plants
- Biogas busses for transport

Energy efficiency improvement

Require participation from all society stakeholders









How?

- Changing society thinking and mindset

16.000 young climate ambassadors

University College & University

High Schools

Green curriculum

Elementary & 2.0

Kindergarten











Infusing our housing association with energy efficiency

Project partners



42°





















HAPPI – collaboration with all Housing associations

The *overall objective* of the project "Social Housing Association Energy Efficiency Process Planning and Investments" (HAPPI) is to:



•Increase the energy renovation rate within the social housing sector via an exemplary action



•Bringing together six social housing organizations in the Danish municipality of Sonderborg



•To tackle the complex interplay of non-technological barriers (organizational, legal, financial) Through process organization and capacity building

leading ultimately to an aggregated **15,2 MEUR** investment programme for sustainable energy measures in their existing building stock.

The total energy efficiency investment will Include **56 departments** of the 6 social housing organizations' building stock, involve a total of appr. 6.000 tenants in **3.318 homes**.

HAPPI impact

Energy training programme to **50-100 persons**, including CEOs, CFOs, technical/administrative staff, caretakers and service staff and central and department board members.

The investment launched by HAPPI is anticipated to lead to energy savings of appr. 11.5 GWh/year + 1.6 GWh/year production of renewable energy and annual **reductions** of 1.640 tons CO2 eq.

Key learning









• 5 different financing schemes

Cheap mortgages

Knowledge of potential

Conclusion: Finances is available



Resources to:

- Identifying the right projects
- Planning the project
- Oversee the process
- Tenants information

Conclusion: Lack of manpower



with energy efficiency



Solutions:

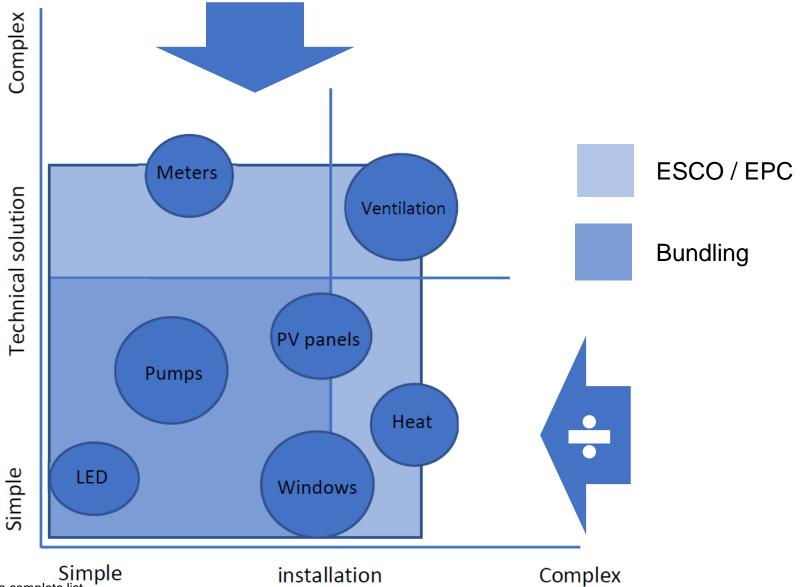
Bundling Projects

ESCO solutions





Identifying solution







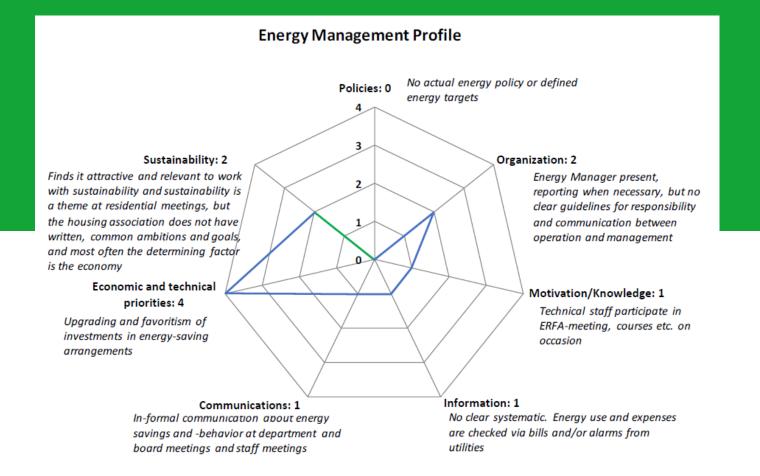
Empowering the housing association







Energy profile







Energy strategies







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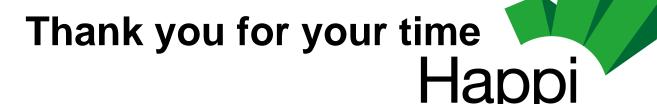
Major achivements

- Empowerment through energy strategies
- Stronger collaboration
- Knowledge of solutions









Infusing our housing association with energy efficiency





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