



**Do you want
to participate
in a project,
developing a
new sustainable
technology,
while improving
your indoor
climate?**





MOTIVATION

Why this project, at all?

We are facing a global climate crisis, of which we are all a part. This project will contribute to the green transition by developing and demonstrating a new system, meant to achieve significant energy savings, which at the same time provide an optimal healthy indoor climate.

Resources are becoming scarce and energy prices are rising, which is why it is important to be part of the green transition. The project will lead the change towards more sustainable housing, creating a healthier indoor climate.

We want to increase energy flexibility, so that you as a homeowner in the future do not have to depend on fossil fuels and contribute to reduce CO2 emissions.

Every year around 250.000 people die, in Europe, due to particle pollution. We want to achieve a healthy indoor climate that can lead to improved health, as you thereby avoid harmful particles that can lead to health complications. Furthermore a good and healthy indoor climate can't be compromised by energy savings.

About the project

The project develops and demonstrates the “Smart Green Indoor Climate Manager”, a user-friendly, cost-effective, intelligent system for operation of roof windows (natural ventilation and solar shading), mechanical ventilation (heat recovery and hybrid ventilation), cooling and heating systems (- heat distribution system, heat pumps, district heating unit or boiler).

The system ensure a, both measured and experienced, healthy indoor climate with minimal consumption of fossil energy through energy efficiency and energy flexibility. The technology supports the green transition in Denmark and the EU - through significant energy savings and energy flexibility in single-family houses.

The intelligent control works with the VELUX Group's and Nilan's products, and with the option of simple and easy integration to third-party products and installations.

The solutions target existing and new single-family houses in the VELUX Group's and Nilan's markets - primarily the Nordic region and the EU and are demonstrated in six typical single-family houses - two in Denmark, two in Germany and two in France.

Smart Green Indoor Climate Manager is being developed in a close collaboration between the VELUX Group, Nilan and the Danish Technological Institute. From these organizations; Energy Specialist, Indoor Climate Specialists, Technology Experts and User behaviour Experts, collaborate on developing and demonstrating the next generation of indoor climate- & energy control.

EUDP 

**The Energy Technology
Development and
Demonstration Programme**



**TEKNOLOGISK
INSTITUT**



Your role

For the project to succeed, we need six families, across Denmark, Germany and France living in single family houses to participate in the project, for a 2-year period. The purpose is to demonstrate the developed system, and document that significant energy savings and a healthier indoor climate can be achieved.

The process & what it will mean for your life

During the two years of the study, there will be a combination of physical and virtual meetings/visits with you.

For both years we plan on visiting you physical two times in your home and in addition to these we plan on doing two virtual meetings. The dates of the meetings will be discussed at our first visit.

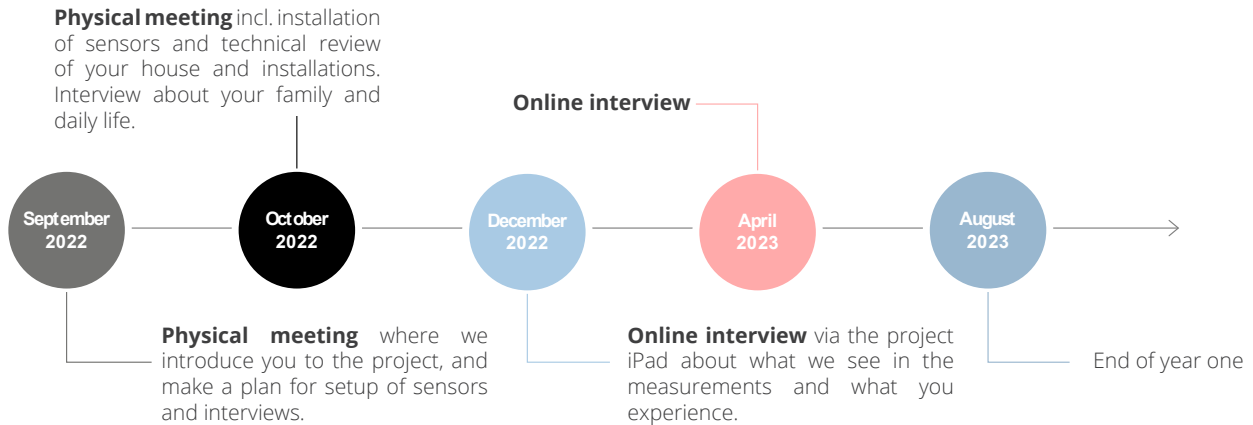
Furthermore it should be mentioned that acute visits can occur, e.g. in relation to defect sensors, unexpected calibration. We will do what we can to limit these.

The overall schedule for meetings and interviews is outlined on the next page:



Year 1: Baseline measurements

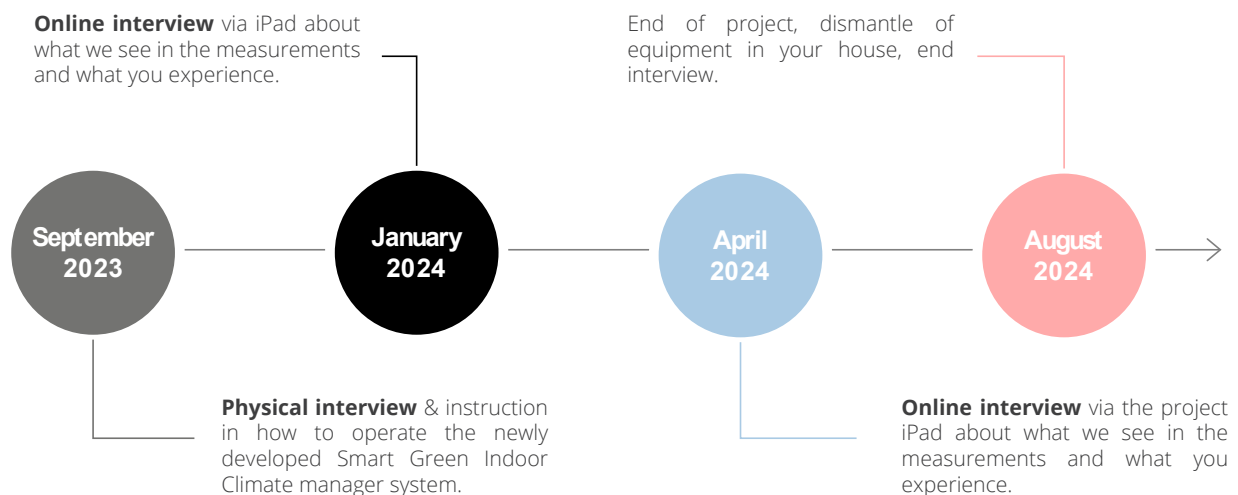
Baseline measurements + development of control system based on measurements in your houses and laboratorie tests



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Year 2: System demonstration

Test and ongoing development of control based on your use of the control, your feedback and measurements in your house



How to qualify for the project

Requirements

We are looking for families consisting of minimum two adults, who can speak English.

On top of this, your house should be a detached house and include:

- Nilan Compact P unit.
- At least 2 Velux windows.

In addition to this your family could consist of two children aged 2-18.

It would benefit the project if both adults are employed in day jobs.

It is critical for the project, that you are motivated for participating and making your house available, throughout the whole project period, of two years.







How will you benefit from your participation:

- Leading indoor climate experts, will examine your house & technical installations.
- In some cases VELUX windows & Nilan ventilation system, will be upgraded.
- Installations will be serviced & balanced.
- Throughout the project, sensor data will be collected, which is intended to, give:
 - A better interoperation of your energy/indoor climate installations.
 - Energy Savings.
 - Improved indoor climate.

It should be mentioned that participation in the project does not cost you anything, in fact you will be compensated for your participation in terms of giftcards.

Upon virtual interviews:

- 30 Euro giftcard

Upon planned physical visits:

- 70 Euro giftcard

Upon acute visits:

- 130 Euro giftcard

When the project is completed, you will be allowed to keep parts of the control system including system upgrades, sensors & iPad.

If you want to know more about project participation, please contact

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