



## Overview

Stam Srl

Horizon 2020 Research and Innovation Framework Programme  
H2020-EeB-2015 Innovation Action



## NewTREND

*New integrated methodology and Tools for Retrofit design towards a next generation of Energy efficient and sustainable buildings and Districts*

**H2020 Project:** EEB - Innovative design tools for refurbishing of buildings at district level

**Project budget:** 5,730,513 € (EC contribution: 4,715,618 €)

**Project duration:** 36 months (Sept 15 to Aug 18)

**Project Coordination:** Integrated Environmental Solutions (UK)

[newtrend-project.eu](http://newtrend-project.eu)



IES



ABUD



JER



iiSBE Italia R&D



Regenera Levante



Granlund Oy



University College Cork



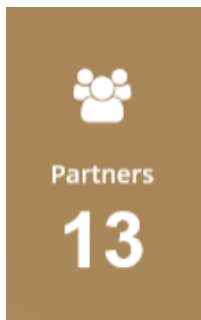
University College Dublin



MUAS



LBS



Partners  
13



STAM



SantCugat



UNIVPM



## Partners

**IES** (UK)  
**ABUD** (HU)  
**JER** (DE)  
**iisBE ITALIA R&D** (IT)  
**REGENERA** (ES)  
**GRANLUND** (FI)  
**UC CORK** (IE)  
**UC DUBLIN** (IE)  
**MUAS** (DE)  
**LBS** (UK)  
**STAM** (IT)  
**SANT CUGAT** (ES)  
**UNIPVM** (IT)

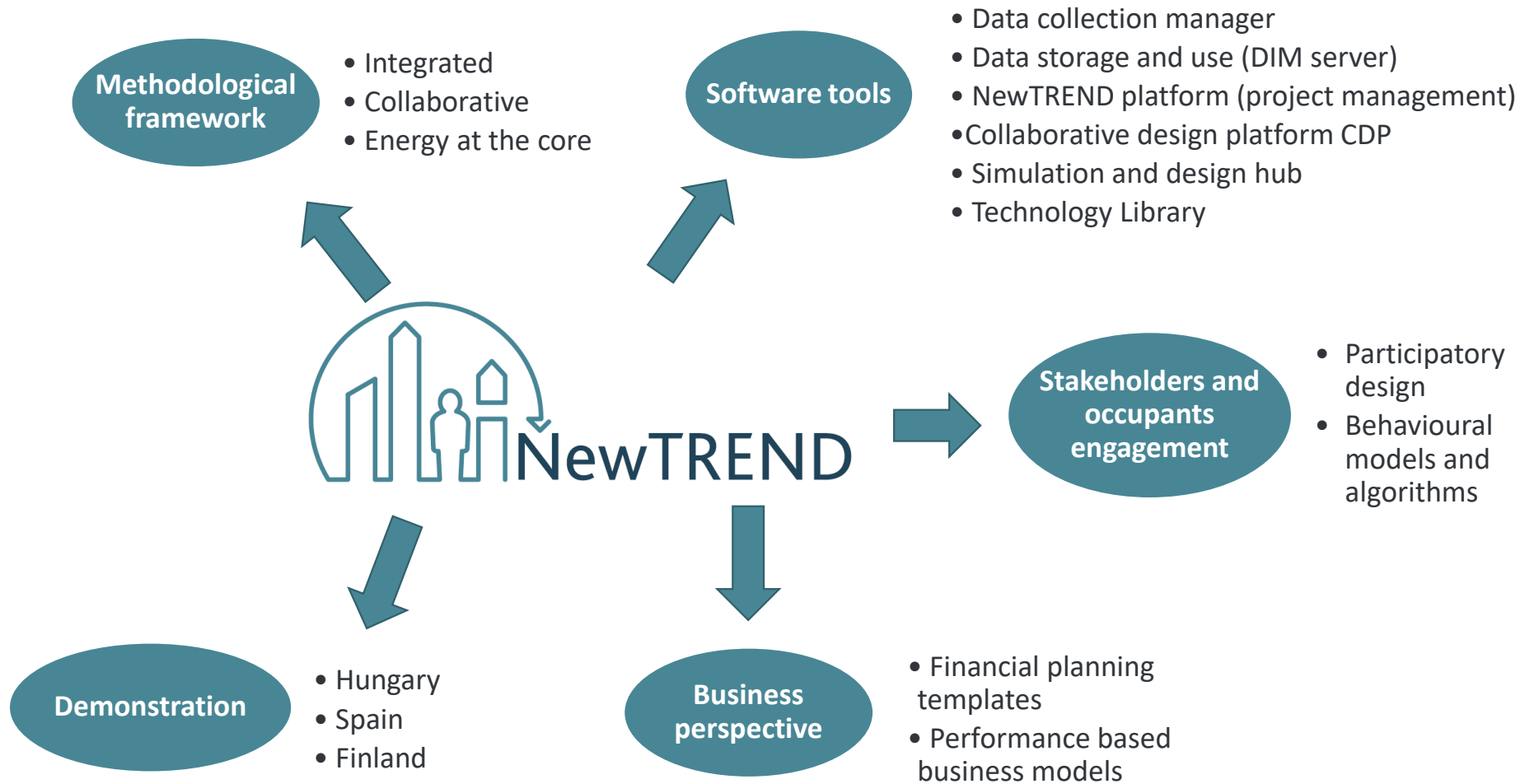
## Overall objective - NewTREND wants to:

- develop an **integrated design methodology** for energy retrofit
- address **all phases of the refurbishment** process (concept design to implementation and operation)
- develop a **toolkit to support each phase**
- **foster collaboration** among stakeholders & **involve building inhabitants** and users
- establish **energy performance as a key** component of refurbishments
- cover **detailed design** of one-two buildings taking into account interactions with the surrounding neighbourhood
- Facilitate the use of BIM for retrofit



## Why do these things?:

- The traditional design process in retrofitting projects often does not include energy related aspects in the early design phase
  - Unexpected delays, budget overruns and sub optimal performance
- Energy related aspects are multidisciplinary in nature and require a clear communication between all stakeholders
- The existing planning tools are not well adapted to being used in the early stage of retrofitting projects – complex and not interoperable
- Data acquisition and accuracy is challenging in retrofitting existing buildings and neighbourhoods.
- Obtaining the required information to carry out a district simulations from neighbouring buildings is often very complicated and the not always fruitful





## Pilot Project 1: Seinäjoki, Finland

GO

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# Old hospital area – Seinäjoki, Finland

- Originally constructed to be the provincial hospital at 1931
- Hospital moved to new central hospital at half way of 1980's
- Four buildings:
  - Main building
  - Dental clinic & office building
  - Heat Distribution building
  - Kivirikko House
- Today's three main tenants:
  - Seinäjoki University of Applied Sciences (SeAMK)
  - Music School of Southern Ostrobothnia
  - Dental Clinic





## Pilot Project 2: Bókay Árpád School, Hungary

ABUD

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## Pilot Project 3: Sant Cugat del Vallès, Spain

### SANT CUGAT

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# Demo site – Sant Cugat del Vallès, Spain, 35 rented apartment for young people

## General information

Located at 7 Mar de la Xina  
Built in 2008



# Demo site – Sant Cugat del Vallès, Spain, Pins del Vallès School

## General information

Built in 1980



# Demo site – Sant Cugat del Vallès, Spain, 2 private houses in Les Planes

## General information

1.228 inhabitants (1% of Sant Cugat population)

Surrounded by a Natural Park

Single family houses

Low social and economic level neighborhood





## Training session: program and aims

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## Training session

# TRAINING SESSION for users of the NewTREND toolset

### GOALS:

- To facilitate the adoption of the toolset developed in NewTREND
- Showcase project results to potential Stakeholders
- Collect a more direct feedback from users that will test the toolset on field

### MATERIAL:

- Video contents
- Paper manual
- Presentation by projects partners
- Credentials to test the software

After the session a questionnaire will be distributed to participants to get their comments and suggestions.

## Training session and modalities

### Today IN-PERSON Training will include:

Introduction – NewTREND methodology and phases of a retrofitting project

Introduction to the NewTREND toolset, user roles and project management functionalities

NewTREND software use – project set up and simulation on a use case



Fill in the Detailed Surveys and the CDP TFT and feedback collection

## What's next?

### WEB-BASED Training will include:

Time-limited access to the NewTREND platform

Software manuals and tutorials

Contacts for user support



# Shall we begin?

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