



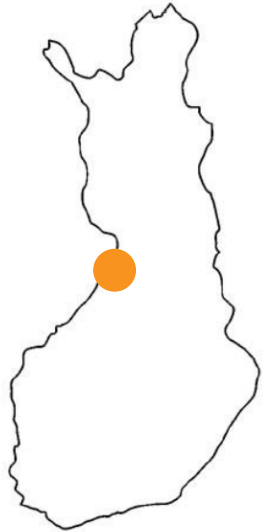
# Oulu University of Applied Sciences – *info*

# eLighthouse – *project info*



# Best Practices – *toolkit model*

# OUAS is one of the biggest university of applied sciences in Finland



10 000

- A total of 23 universities of applied sciences operate as public limited companies in the Ministry of Education and Culture's administrative branch.
- Oulu University of Applied Sciences (OUAS, Oamk) is the **6th biggest in Finland** and the most attractive higher education institution in Northern Finland.
- Oamk is a higher education community of more than **10 000 people**.
- We educate more than half of the highly-educated persons in our region.
- Nearly 80% of graduates stay and work in our area.
- 26 Bachelor's degree programmes, of which 3 are in English
- 23 Master's degree programmes, of which 5 are in English

# OUAS in numbers - 2021

## RESEARCH AND DEVELOPMENT OPERATIONS

Total volume **10,9 M€**  
 Amount of external funding **7,1 M€**  
 Companies participate annually in projects **450**

**TURNOVER** **55,8 M€**

## RDI

research, development and innovation work (RDI)

- solutions for low-carbon initiatives (carbonneutral innovations)
- digital solution
- digital pedagogy



## The Most Attractive Higher Education Institution in Northern Finland

As a higher education community of more than **10 000** people, Oamk is a significant regional influencer.

**73%** of students hail from the province of Northern Ostrobothnia. Nearly **80%** of graduates stay and work in our area.

Oamk has a **72%** graduate employment rate.



## GRADUATES

Bachelor's degrees **1 322**  
 Master's degrees **110**  
 Vocational teacher education **197**  
 Alumni **28 000**



## STUDENTS

**9 500** students  
**300** international degree students  
**500** staff members

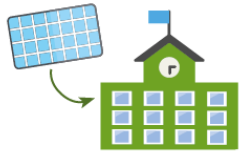


## ATTRACTION

**6,3** applicants per starting place for English degree programmes in 2021  
**6,2** applicants per starting place for Finnish degree programmes in spring 2021

# eLighthouse project – key components

OAMK



Retrofitting of public buildings



Waste as energy and the reuse of waste



Smart energy solutions for public infrastructure and housing



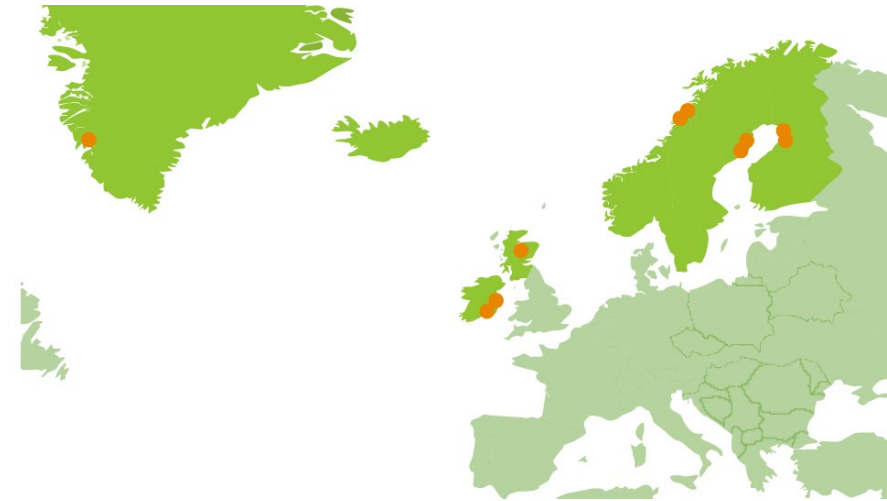
Energy reduction solutions for buildings and waste management



Raising Awareness



Domestic energy retrofit



# eLighthouse project info

## WORKPACKAGES

**WP1**  
ENERGY SAVINGS IN  
MUNICIPAL BUILDINGS AND LIGHTING

## PROCEDURES

**250** public buildings  
retrofitted (5% less energy,  
3% more renewables)  
**40** deep renovation

## SMART SOLUTIONS (examples 12/16)

- 1 Energy Management Software Tool (Ireland)
- 2 County Hall Campus – Solar Shading (Ireland)
- 3 ISO 50001 Energy Management (Ireland)
- 4 Energy visualization in public kitchen
- 5 Geothermal heating in municipality building (Oulu)

**WP2**  
ENERGY-EFFICIENCY ADVICE AND  
ENERGY SAVING FOR DOMESTIC  
RENOVATION  
AND NEW BUILDINGS

**2500** houses retrofitted (25%  
better energy efficiency)  
**2000** new houses with better  
energy qualification (10%)

- 6 Sustainable Energy Communities SEC concept (Ireland)
- 7 Best Practice for utilising 3D Modelling for Energy Efficiency (Scotland)
- 8 Smart Energy monitoring to influence behavior (Ireland)
- 9 Energy signature as a tool to identify building's energy use variations (Sweden)

**WP3**  
IMPROVED WASTE UTILIZATION  
WASTE FOR ENERGY AND REUSE

Reduce energy use by **15%** in  
waste management  
20% less CO<sub>2</sub>

- 10 MivaMag Technology for Wastewater treatment (Norway)
- 11 Waste incineration models (Oulu)
- 12 Gas purification plant for biogas (Oulu)

# Best practices – CO2

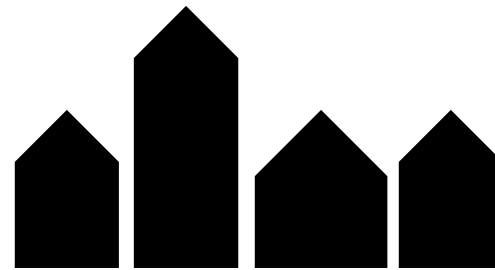
WORKPACKAGES - AIMS

## CO2

**CARBON NEUTRAL  
SOLUTIONS  
LOW CARBON  
INNOVATIONS  
CARBON NEUTRAL  
INNOVATIONS**

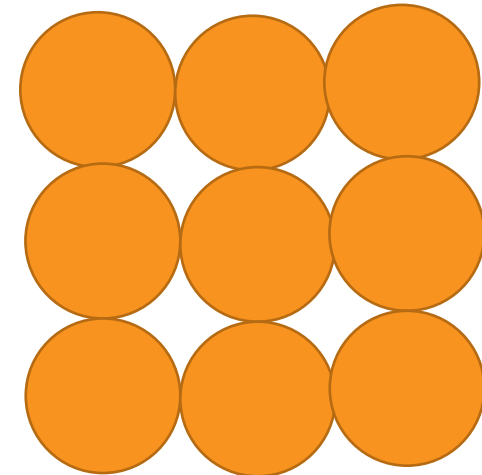
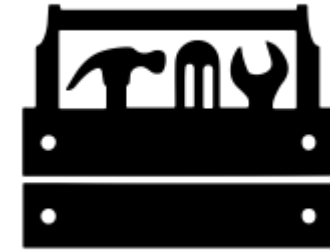
PROCEDURES - TARGETS

## NUMBERS IN PRACTICE



SMART SOLUTIONS

## TOOLKIT



**OAMK**

**OULU UNIVERSITY OF APPLIED SCIENCES**