

CREATIV

Competence project for **R**educed **E**nergy use through **A**dvanced **T**echnology **I**nno**V**ations

- Knowledge-building project (KMB) including research and industry partners, supported by the Research Council of Norway
- Total budget 6.5 million € plus 3 million € in-kind
- Project period 2009-2013

CREATIV Objectives

The objective of CREATIV is to demonstrate that more than 1/4 reduction in Norwegian energy consumption and greenhouse gas emissions is feasible by 2020.

Sub objectives

- Develop innovative knowledge and technology for waste heat recovery and efficient heating and cooling
- Educate and train specialists in industry energy efficiency
- Disseminate existing and emerging knowledge



The key to success

REMA 1000



Interaction



Technology vendors

R&D providers



ITRI





Research platform for energy efficiency in industry

Opportunities for energy efficiency

- Large amounts of surplus heat
- Need for heating and cooling
- Need for power
- Potentials for more efficient energy use

R&D challenges focused by CREATIV:

- Electricity production from surplus heat
- Innovative heat pumping technologies with CO₂ as working fluid
- Optimal thermal processing
- Industrial air ventilation
- Efficient utilisation of low temperature heat



Areas of application:

- Metallurgy
- Pulp and paper
- Fishery
- Food production
- Supermarkets

Approach:

- Theoretical analyses
- Modelling, simulation and optimisation
- Laboratory experiments
- Building prototypes
- Testing at industry sites

Competence building in CREATIV

