

Good Practice Guide

Energy Efficiency Excellence

from EnercitEE regions



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Energy efficiency excellence from EnercitEE regions

The Energy 2020 Strategy for Competitive Sustainable and Secure Energy from the European Commission stresses that energy efficiency is the most cost effective way to reduce emissions and improve competitiveness, as well as energy security, and to make energy more affordable for consumers. While we are on track for the 20 % target for renewables by 2020, we are far from reaching the 20 % energy efficiency target in Europe by 2020.

The European Commission's draft for a new Energy Efficiency Directive proposes a series of new measures that mainly concern the building and energy sector. However, this draft Directive is currently discussed controversially between the EU member states.

EnercitEE strives to identify the energy efficiency potential of electricity, from heat and cooling generation and distribution to consumption and storage. In this energy chain, there is huge potential that can be tapped.

The share of combined heat and power generation, for example, still needs to increase. Nowadays, technology to transform heat into cooling (trigeneration) is available and needs further market penetration, especially in those European regions where a growing number of houses install air conditioning, which results in a higher electricity demand.

Energy losses from district heating grids can be prevented when pipes are properly insulated and heat is distributed efficiently to a large number of consumers within short distances. At the end of the chain, consumers can save energy and use it more efficiently. As an example, many household heating systems keep temperatures constant even at times when nobody is at home – which leads to energy consumption and costs that could be avoided.

Even renewables can perform more efficiently if used under appropriate climatic conditions, such as in Smaland, where energy is generated from biomass that is readily available in regional forests.

We have developed this Good Practice Guide to demonstrate the energy efficiency potential in the specific areas of competence of the **EnercitEE** partner regions. It highlights prominent areas of energy efficiency potential, such as buildings, heat/power generation and distribution, transport, innovation and technology, and communication and motivation. In many cases, the areas interlink with each other. This highlights the need for an integrated planning approach in energy efficiency; such an approach would make a significant contribution to a sustainable European energy strategy.

The Good Practice Guide is one of the results of the interregional exchange of experience of the **EnercitEE** partner regions and will, together with the activities within the sub-projects, help to improve regional and local energy efficiency policies.

We are positive that the good practices presented in this guide will spur animated discussion and exchange, within the partner consortium and beyond. We hope that some of the ideas will be transferred between regions and that many new good practices will evolve out of this exchange.

The **EnercitEE** partner consortium

EnercitEE: European networks, experience and recommendations helping cities and citizens to become Energy Efficient

The EU Climate and Energy Package is considered key to an energy efficient and low-carbon Europe. The three overall objectives have become generally known as the 20–20–20 targets: a 20 % cut in emissions of greenhouse gases by 2020, compared with 1990 levels; a 20 % share of renewables; and a 20 % cut in energy consumption.

EnercitEE seeks to implement the EU targets on energy efficiency practically. The project, which is carried out under the EU programme INTERREG IVC, builds upon experiences and existing networks from the forerunner project energy'regio.

EnercitEE is carried out as a mini-programme with 6 partners from 5 European regions. The results of the project will be long-lasting through directly involving public policy makers and private consumers in the programme's activities.

The exchange of experience is an essential part of this mini-programme: the partners compile policy instruments, good practices, case studies and organise training sessions and interregional symposia. Moreover, **EnercitEE** contributes to the improvement of local and regional policies and provides assistance in the transfer of knowledge on energy efficiency and sustainable transport.

Practical guidelines and policy recommendations produced within **EnercitEE** will provide valuable assistance for European regions aiming to improve their energy performance and policies.

More information on the project's website www.energitee.eu
and the weblog www.energitee.eu/blog

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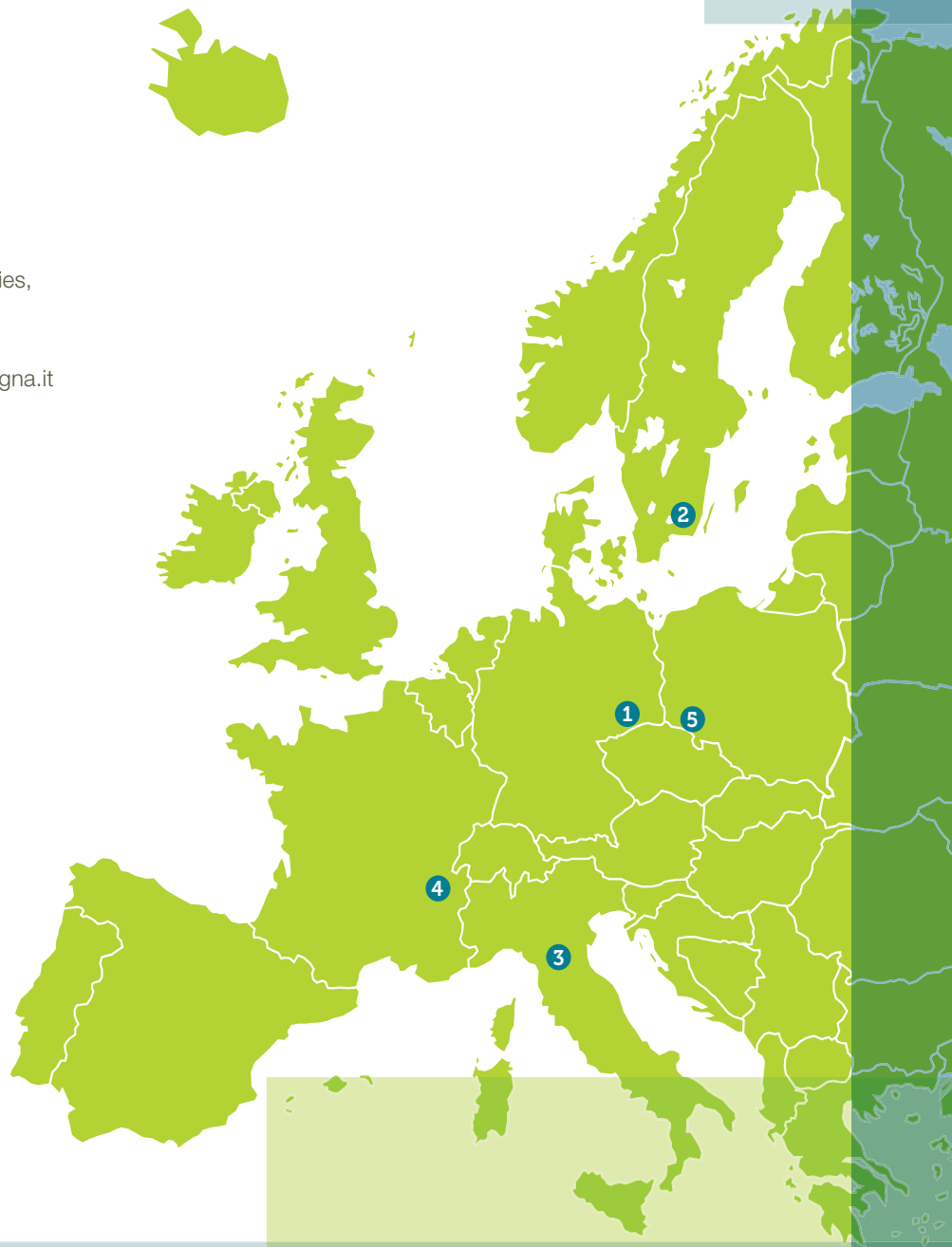
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References, abbreviations and picture credits

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- Intelligent Energy Europe, Project Report 16; Energy education: Changing their habits in our lifetime; No. 8 of April 2009

Abbreviations

ADEME	Agence de l'Environnement et de la Maîtrise de l'Energie (French Environment and Energy Management Agency)
BBC	Bâtiment de basse consommation énergétique (low-energy house)
BMBF	Bundesministerium für Bildung und Forschung (Federal Ministry of Education and Research)
CCI	Chambre de Commerce et d'Industrie (Chamber of Industry and Commerce)
CHP	Combined heat and power (cogeneration)
CHCP	Combined heat, cooling and power (trigeneration)
CO	Carbon monoxide
COP	Coefficient of performance
DH	District heating
DHW	Domestic hot water
CNG	Compressed natural gas
DSM	Demand Side Management
EAC	Energy Advice Centre
EDF	Électricité de France SA (Energy company of France)
EE	Energy efficiency
EEG	Erneuerbare Energie Gesetz (German RES act)
EER	Energy efficiency ratio
EEWärmeG	Erneuerbare-Energien-WärmeGesetz (Renewable Energies Heat Act)
EIC	Energy Information Centres
ENA	Piattaforma Energia Ambiente (Energy and Environment Platform)
ENEA	Ente per le Nuove tecnologie, l'Energia e l'Ambiente (National Agency for New Technologies, Energy and the Environment)
EnercitEE	European networks, experience and recommendations helping cities and citizens to become Energy Efficient
EnEV	Energieeinsparverordnung (German Energy Saving Ordinance)
EPBD	Energy Performance of Buildings Directive
ERA	Emilia-Romagna Environment Award
ERDF	European Regional Development Fund
ICPE	Installation classée pour la protection de l'environnement (classified installation for protection of the environment)
ICT	Information and communication technology
IEE	Intelligent Energy Europe (EU Programme)
IEMP	Inter Enterprise Mobility Plan
GAEC	Groupement agricole d'exploitation en commun (collective group farming)
GHG	Green house gas
GPG	Good Practice Guide
GWh	Gigawatt hours
HC	Hydrocarbon
HCNM	Non methane hydrocarbon
HVAC	Heat Ventilation Air Conditioning
Keds	Kommunaler Energie-Dialog Sachsen (Saxon communal energy dialogue)
Ktoe	Kiloton of oil equivalent
kWh/m²/a	Kilowatt hours per m ² per year
KWKG	Kraft-Wärme-Kopplungsgesetz (German CHP act)
MT	Medium voltage
MWh/a	Megawatt hours per year
Nm³	Normal Meter Cube
NMVOC	Non methane volatile organic compounds
NO_x	Nitric oxide
PM₁₀	Particulate Matter = Particles of 10 micrometers or less

PRIT	Regional Integrated Plan for Transport
PV	Photovoltaic
PZPWD	Plan zagospodarowania przestrzennego województwa dolnośląskiego (Zoning Plan of the Lower Silesian Voivodeship)
RES	Renewable energy sources
RL EuK 2007	Förderrichtlinie Energieeffizienz und Klimaschutz (Saxon funding guideline on energy efficiency and climate protection)
RT	Réglementation Thermique (thermal regulation)
SAENA	Sächsische Energieagentur (Saxon Energy Agency)
SEF	Social energy fund in the region of Haute-Savoie
SHON	Surface hors d'œuvre nette (floor area for real estate construction projects)
SME	Small and medium enterprises
SMI	Staatsministerium des Innern (Saxon State Ministry of the Interior)
SMWK	Sächsisches Staatsministerium für Wissenschaft und Kunst (Saxon State Ministry for Science and the Arts)
SO₂	Sulfur dioxide
SYANE	Syndicat des Energies et de l'Aménagement Numérique de la Haute-Savoie (Syndicate of Haute-Savoie municipalities)
TWh/a	Terrawatt hours per year
VT	Low voltage

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