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Delegations will find attached document SWD(2016) 404 final - PART 4/4.

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EUROPEAN  
COMMISSION

Brussels, 30.11.2016  
SWD(2016) 404 final

PART 4/4

**COMMISSION STAFF WORKING DOCUMENT**

**Good practice in energy efficiency**

*Accompanying the document*

**Proposal for a Directive of the European Parliament and of the Council  
amending Directive 2012/27/EU on Energy Efficiency**

{COM(2016) 761 final}

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## Annex I: National policies and measures identified as successful policies in the ODYSEE-MURE project

### Selected Member States

Code	Most successful energy efficiency measures in France	Avg Score	Measure Type 1)	Starting Year
<a href="#">HOU-FRA7</a>	Sustainable Development Tax Credit	4.1	Fis/Tar	1995
<a href="#">HOU-FRA16</a>	Local energy information centres (EIE)	4.0	Inf/Edu	2001
<a href="#">HOU-FRA31</a>	Zero-rated eco-loan	3.5	Fin	2009
<a href="#">TER-FRA1</a>	Audits subsidies in buildings	3.8	Fin	2000
<a href="#">TER-FRA8</a>	EU-related: Energy Performance of Buildings (Directive 2002/91/EC) - Energy performance diagnosis	3.2	Leg/Inf	2006
<a href="#">IND-FRA15</a>	Loans for small and medium sized enterprises	3.6	Fin	2010
<a href="#">TRA-FRA22</a>	Voluntary commitments to reduce CO <sub>2</sub> emissions	3.9	Co-op	2008
<a href="#">TRA-FRA19</a>	Automobile bonus malus	3.6	Fis	2007
<a href="#">GEN-FRA1</a>	Energy Savings Certificates (ESC)	4.2	NMB	2006
<a href="#">GEN-FRA2</a>	Information and advertising campaign: why wait?	3.6	Inf/Edu	2008
<a href="#">GEN-FRA18</a>	Heat Fund	3.6	EE/CC/RES	2008

Code	Most successful energy efficiency measures in Germany	Avg Score	Measure Type 1)	Starting Year
<a href="#">HOU-GER33</a>	KfW Programme "Energy-efficient refurbishment" (former CO <sub>2</sub> Building Rehabilitation Programme)	3.9	Fin	2009
<a href="#">HOU-GER8</a>	EU-related: Ecodesign Directive for Energy-using Products (Directive 2005/32/EC) - Energiebetriebene-Produkte-Gesetz - EBPG	3.7	Leg/Nor	2005
<a href="#">HOU-GER6</a>	EU-related: Energy Performance of Buildings (Directive 2002/91/EC) - Energy Savings Ordinance (Energieeinsparverordnung - EnEV )	3.5	Leg/Inf, Leg/Nor	2002
<a href="#">TER-GER35</a>	EU-related: Recast Ecodesign Directive for Energy-related Products (Directive 2009/125/EC) - Eco-Design of Energy-using products (Energiebetriebene-Produkte-Gesetz - EBPG)	3.8	Leg/Nor	2011
<a href="#">TER-GER29</a>	Special fund for energy efficiency in SME's	3.6	Fin	2008
<a href="#">TER-GER32</a>	Smart Metering	3.5	Leg/Inf	2010
<a href="#">IND-GER36</a>	Special fund for energy efficiency in SME's	3.7	Fin	2008
<a href="#">IND-GER18</a>	Voluntary agreement with German industry II	3.5	Co-op	2000
<a href="#">TRA-GER39</a>	EU-related: Emission performance standards new passenger cars (Regulation 443/2009/EC) - Accelerating technical development / CO <sub>2</sub> strategy for passenger cars	3.9	Leg/Nor	2009
<a href="#">TRA-GER32</a>	Improving the infrastructure for using bicycles	3.8	Fin	2002
<a href="#">TRA-GER2</a>	Heavy goods vehicle toll charges	3.3	Fin	2005
<a href="#">GEN-GER29</a>	National Climate Initiative (NKI)	3.7	EE/CC/RES, NMB	2008
<a href="#">GEN-GER19</a>	National Energy Efficiency Action Plan (NEEAP) of the Federal Republic of Germany	3.6	EE/CC/RES	2008

Code	Most successful energy efficiency measures in Greece	Avg Score	Measure Type 1)	Starting Year
<a href="#">HOU-GRE16</a>	"Energy Savings in households" Program	4.3	Fin, Leg/Nor	2010
<a href="#">HOU-GRE15</a>	Energy Performance of residential Buildings	4.0	Leg/Inf, Leg/Nor	2009
<a href="#">HOU-GRE20</a>	Installation of electronic and intelligent metering of electricity and natural gas residential consumers	3.7	Co-op, Fin, Inf/Edu	2010
<a href="#">TER-GRE13</a>	Energy upgrading of existing buildings through third-party financing arrangements (TPF), energy performance contracting and public and private joint ventures (PPJV)-Tertiary Sector	4.3	Co-op, Fin, Leg/Inf	2012
<a href="#">TER-GRE9</a>	Energy savings in Local Self-Governments. - "Economize" program	4.1	Fin, Inf/Edu/Tr	2010
<a href="#">TER-GRE10</a>	EU-related: Energy Performance of Buildings (Directive 2002/91/EC) - Energy Performance of Buildings of Tertiary sector	4.0	Leg/Nor	2010
<a href="#">IND-GRE6</a>	Incentives for obligatory implementation of Energy Management Systems	3.6	Fin, Leg/Inf	2008
<a href="#">IND-GRE10</a>	Promotion of Combined heat and power (CHP) and district heating systems- Industry Sector	3.5	Fin	2009
<a href="#">IND-GRE7</a>	GRE7-Promotion of voluntary agreements in industrial sector	3.4	Inf/Edu/Tr, Leg/Inf, Leg/Nor	2010
<a href="#">TRA-GRE3</a>	Improvements in Public Transport Networks	4.0	Infr	1998
<a href="#">TRA-GRE13</a>	Taxation of new cars according CO <sub>2</sub> emission	3.9	Fis	2010
<a href="#">TRA-GRE10</a>	Incentives for replacement private vehicles	3.8	Fin	2008
<a href="#">GEN-GRE9</a>	Program for Fin support of technological investments in energy efficiency	4.2	EE/CC/RES, Leg/Nor, NMB	2008
<a href="#">GEN-GRE10</a>	Farther penetration of Natural Gas and LPG in Greek market	3.8	EE/CC/RES, Leg/Nor, NMB	2008
<a href="#">GEN-GRE11</a>	Target campaigns for Tr, informing and awarding of best practice activities	3.7	EE/CC/RES, Leg/Nor	2008

Code	Most successful energy efficiency measures in Sweden	Avg Score	Measure Type 1)	Starting Year
<a href="#">HOU-SWE23</a>	Technology procurement groups	4.3	Co-op	1989
<a href="#">HOU-SWE4</a>	Energy and carbon dioxide tax in the household sector	3.9	Fis	1991
<a href="#">IND-SWE17</a>	Energy efficiency networks for the industry	3.7	Co-op, Inf/Edu/Tr	2009
<a href="#">IND-SWE3</a>	The Programme for Energy Efficiency in Industry	3.2	Co-op	2005
<a href="#">TRA-SWE24</a>	Energy efficiency measures in transport Infrastructure	4.2	Infr	2011
<a href="#">TRA-SWE13</a>	Value of fringe benefits for company cars	3.6	Fis	1997
<a href="#">TRA-SWE12</a>	Vehicle taxation according to CO <sub>2</sub> emissions	3.4	Fis	2006
<a href="#">GEN-SWE12</a>	Energy and carbon dioxide taxes)	3.8	EE/CC/RES	1995
<a href="#">GEN-SWE8</a>	Local Energy/Climate Counsellors	3.5	EE/CC/RES	1998

1) Co-op = co-operative measures, Leg/Nor = Legislative/Normative measures, Leg/Infor = Legislative/Informative measures, Fis/Tar = Fiscal/Tariffs, Fin = Financial measures, Fis/Tar = Fiscal/Tariff-based measures, Inf/Edu/Tr = Information/Education/Training measures, NMB = New Market-based instruments, Infra = Infrastructure measures, EE/CC/RES = General Energy Efficiency / Climate Change / Renewable Programmes,

Source : MURE database, September 2015 (the measure codes refer to the MURE database)

### Overall scoring (most successful energy efficiency measures with the two highest average scores per EU Member State)

Country	Code	Measure Title	Avg. Score	Measure Type 1)	Starting Year
AU	GEN-AU2	"klima:aktiv" National programme for climate protection	4.2	EE/CC/RES	2005
AU	HOU-AU13	Residential building subsidy	3.8	Fin	1989
BEL	IND-BEL4	Flanders - Energy efficiency criteria in environmental permits	3.7	Leg/Inf	2004
BEL	HOU-BEL30	Wallonia - Financial incentives for RUE investments in buildings	3.5	Fin	2005
BG	HOU-BG19	Extension of the administrative, functional and financial capacity of Bulgarian Energy Efficiency and RES Fund with authorizing it for financing projects with renewable energy sources	3.8	Fin	2011
BG	TER-BG15	Financing of energy efficiency projects in municipal buildings by Operational Program Regional Development	3.8	Fin	2010
CR	TRA-CR18	Eco-driving training for drivers of road vehicles	4.3	Inf/Edu/Tr	2011
CR	HOU-CR9	Building regulations and enforcement	4.2	Leg/Nor	2006
CY	HOU-CY11	Net metering scheme was introduced for the promotion of small residential photovoltaic systems	3.9	Fin	2013
CY	IND-CY3	EU-related: Amended EU Emission Trading Scheme (Directive 2009/29/EC) - Governmental grants/subsidies scheme for the promotion of RES, energy saving technologies and the creation of a special fund for financing or subsidising	3.9	Fin, Inf/Edu/Tr	2003
CZ	HOU-CZ17	EU-related: Energy Labelling of Household Appliances (Directive 92/75/EC) - Energy labelling of household appliances – support of implementation	3.6	Leg/Nor	2004
CZ	HOU-CZ19	Green Savings Programme	3.4	Fin	2009
DK	GEN-DK6	The Energy Companies' saving effort	4.3	Co-op	2006
DK	GEN-DK10	Danish Energy Agreement 2012	4	EE/CC/RES	2012
FIN	IND-FIN14	Energy Efficiency Agreement of Industry 2008-2016	4.5	Co-op	2008
FIN	TER-FIN3	Energy Auditing Programme in the Service Sector	4.4	Fin, Inf/Edu/Tr	1994
FRA	GEN-FRA1	Energy Savings Certificates (ESC)	4.2	NMB	2006
FRA	HOU-FRA7	Sustainable Development Tax Credit	4.1	Fis/Tar	1995
GER	HOU-GER33	KfW Programme "Energy-efficient refurbishment" (former CO2 Building Rehabilitation Programme)	3.9	Fin	2009
GER	TRA-GER39	EU-related: Emission performance standards new passenger cars (Regulation 443/2009/EC) - Accelerating technical development / CO2 strategy for passenger cars	3.9	Leg/Nor	2009

Source: ODYSSE-MURE (2015): *Synthesis: Energy Efficiency Trends and Policies in the EU*

## Annex II: Overview of good practices per Member States as identified by the CA EED

Country	Title	Theme	Outcome
Austria	<a href="#">Measuring Impacts - Energy Counselling - Austria</a>	<a href="#">Public Sector (CT2)</a>	At the moment, the calculation method is used for reporting for the Energy Services Directive (ESD) only.
Austria	<a href="#">Consumer Information - Information campaign on energy management systems for SMEs - Austria</a>	<a href="#">Consumer Information (CT6)</a>	Guidebook, distribution of guidebook via Austrian Ministry of Economy, Family and Youth, the Austrian Energy Institute for Business, Austrian Chamber of Commerce and the Federation of Austrian Industries
Belgium	<a href="#">Article 4 building renovation strategy - Brussels Capital Region</a>	<a href="#">NEEAPs (CT1)</a>	n/a
Bulgaria	<a href="#">Energy Efficiency for Competitive Industry Financing Facility - Bulgaria</a>	<a href="#">Financing (CT4)</a>	Still the project is at an early phase of implementation and no results are available. It is expected that the programme will lead to high absorption rates of the SCF for energy efficiency in SMEs.
Croatia	<a href="#">Consumer Information - Energy efficiency information campaign - Croatia</a>	<a href="#">Consumer Information (CT6)</a>	<p>The interest in energy efficiency has significantly increased as well as implementation of EE measures by citizens. Public opinion surveys have revealed the following:</p> <ul style="list-style-type: none"> <li>• number of citizens familiar with energy efficient products available on the market has increased from 33,4% to 43,9%</li> <li>• number of citizens using CFLs increased from 48% to 67,4%</li> <li>• number of citizens using A+ appliances increased from 22% to 30,8%</li> <li>• number of citizens using low-e windows increased from 14,8% to 23,4%</li> </ul> <p>In addition, the number of requests for subsidies from the Fund has increased significantly since the start of the campaign.</p>
Croatia	<a href="#">IPMVP obligation for public energy performance contracts - Croatia</a>	<a href="#">Energy Services (CT5)</a>	<p><b>On-going</b></p> <p>It is expected that Measurement &amp; Verification based on IPMVP in the public sector will enable better evaluation of expected and achieved savings and eventually increase the trust in energy services, which could become the solution for large-scale refurbishment of the public buildings in stock</p>
Czech Republic	<a href="#">Energy audits - Czech Republic</a>	<a href="#">Energy Services</a>	There are more than 350 energy auditors and more than 1 500 energy audits are prepared



Country	Title	Theme	Outcome
		<a href="#">(CT5)</a>	annually.
Cyprus	n/a	n/a	n/a
Denmark	n/a	n/a	n/a
Estonia	n/a	n/a	n/a
Finland	<a href="#">EcoStart – Specialist Product Service for SMEs - Finland</a>	<a href="#">Financing (CT4)</a>	The impact assessment on the outcomes and benefits will be carried out in 2013.
Finland	<a href="#">Energy Services - Finland</a>	<a href="#">Energy Services (CT5)</a>	<p>The outcomes have been:</p> <ul style="list-style-type: none"> <li>• ESCO seminars for ESCOs and potential clients (approximately every second year)</li> <li>• ESCO project register</li> <li>• ESCO guidelines and brochures</li> <li>• Articles about ESCO service</li> <li>• Information dissemination by phone etc.</li> <li>• <input type="checkbox"/> Separate studies about ESCO service</li> </ul>
Finland	<a href="#">Public Sector - Towards smarter green public procurement processes - Finland</a>	<a href="#">Public Sector (CT2)</a>	The key achievement will be the database, a sustainable public procurement excellence network and a smoothly running Help Desk.
Finland	<a href="#">Study of Cost Effectiveness of Individual Heat Meters and Heat Cost Allocators in Apartment Buildings - Finland</a>	<a href="#">Metering and Billing (CT3)</a>	<p>The most important outcome about the project was to get reliable facts and results about the cost effectiveness of heat meters or heat cost allocators in apartments in Finland.</p> <p>The topic i.e. heat metering in apartments, is not new in Finland but it has been under discussion and judgment for decades. The heat meters or cost allocators have faced mistrust and critics for many reasons (listed e.g. in the statement of Technical Board of Helsinki City 1.4.2008) though cost effectiveness have not been lately studied in deep details like in this study.</p> <p>Now the study, that was focusing clearly to the direct costs, shows the heat meters and cost allocators in apartments not to be cost effective in the Finnish circumstances (taking into account the state of energy efficiency, typical HVAC solutions in apartment buildings and</p>

Country	Title	Theme	Outcome																								
			<p>the climate in Finland). So the result of the study confirms the previous views and positions of the issue.</p> <p>The study will give a clear indication to the authorities when formulating the energy efficiency law for implementing EED.</p>																								
France	<a href="#">Writing the French 2014 NEEAP - France</a>	<a href="#">NEEAPs (CT1)</a>	<ul style="list-style-type: none"><li>• The key achievement is the NEEAP itself, and the comprehensive overview it gives about our energy efficiency policies. The evaluations in the NEEAP (especially TD calculations using EC recommended methods) are also very helpful to identify sectors generating most energy savings, and sectors where more efforts are needed.</li><li>• The NEEAP is a very useful communication tool for us. After its publication in spring 2014, we will update a synthesis brochure, with the communication team of the ministry, like we did after our 2nd NEEAP.</li></ul>																								
France	<a href="#">The use of ERDF funds in France for EE in social housing - France</a>	<a href="#">Financing (CT4)</a>	<p><b>At the national level, by the end of 2011:</b></p> <ul style="list-style-type: none"><li>• <b>67 000 households</b> with low incomes benefitting from energy savings (~2 200 dwellings refurbished per month)</li><li>• <b>15 000 local jobs</b> created or maintained</li><li>• ERDF Average funding: <b>EUR 2 886</b> per dwelling, representing <b>14%</b> of the investment</li><li>• Global investment: <b>EUR 1.1 billion</b></li><li>• Estimation of energy savings per year per households:<ul style="list-style-type: none"><li>- A 40% reduction in energy consumption</li><li>- EUR 360-1000 saved per year</li></ul></li></ul> <p><b>Energy consumption of dwellings before and after refurbishment:</b></p> <div><div><p><b>Before</b></p><table><thead><tr><th>Category</th><th>Percentage</th></tr></thead><tbody><tr><td>A</td><td>0%</td></tr><tr><td>B</td><td>0%</td></tr><tr><td>C</td><td>4%</td></tr><tr><td>D</td><td>25%</td></tr><tr><td>EFG</td><td>71%</td></tr></tbody></table></div><div><p><b>After</b></p><table><thead><tr><th>Category</th><th>Percentage</th></tr></thead><tbody><tr><td>A</td><td>15%</td></tr><tr><td>B</td><td>31%</td></tr><tr><td>C</td><td>52%</td></tr><tr><td>D</td><td>2%</td></tr><tr><td>EFG</td><td>0%</td></tr></tbody></table></div></div>	Category	Percentage	A	0%	B	0%	C	4%	D	25%	EFG	71%	Category	Percentage	A	15%	B	31%	C	52%	D	2%	EFG	0%
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C	52%																										
D	2%																										
EFG	0%																										

Country	Title	Theme	Outcome
			(source USH)  For the first call for proposals, projects have been completed recently: the follow up is going on.
France	<a href="#">Financing - Energy Performance Contracting for Public Buildings - France</a>	<a href="#">Financing (CT4)</a>	<p>Main outcomes :</p> <ul style="list-style-type: none"> <li>• Connection of 69 buildings to a centralized management system ;</li> <li>• Installation of condensation boilers in 17 buildings ;</li> <li>• Connection of 2 buildings to a heat network</li> <li>• Installation of wood-fired boilers in 2 schools</li> <li>• Installation of 38sqm of solar thermal panel for hot water production at the central kitchen</li> <li>• Installation of heat pumps in 13 buildings</li> <li>• Replacement of all 284 doorframe of the Frédéric Mistral school</li> </ul> <p>Expected benefits : <b>17% reduction in primary energy consumption and EUR 177 000 savings for the city</b></p>
France	<a href="#">Financing - Energy Performance Contracting for Schools- France</a>	<a href="#">Financing (CT4)</a>	<p>Some results of the project:</p> <ul style="list-style-type: none"> <li>- the building of 6 biomass boiler rooms,</li> <li>- the installation of PV panels on 12 schools.</li> <li>- the connecting of one school to a low carbon heat network,</li> <li>- the improvement /optimization of lighting and heating management in all schools.</li> </ul> <p>The Koeberlé de Sélestat school benefited from a 4,3 M€ investment to build a wood-fired boiler room and isolate the</p>
France	<a href="#">Financing - Technical Assistance - France</a>	<a href="#">Financing (CT4)</a>	<p><b>Project is on-going</b></p> <p>The expected benefits of the project are delivery of important energy savings and emissions reductions for 1/6 of Paris' schools and creation of a new culture for energy efficiency for all the pupils, teachers and parents involved in these schools</p>
Germany	<a href="#">Approach for the chapter on the market for energy services in the next NEEAP - Germany</a>	<a href="#">NEEAPs (CT1)</a>	Information basis for the assessment of the market for energy services and therefore also a basis for the detection of challenges and a further development of the market for energy services.

Country	Title	Theme	Outcome
Germany	<a href="#">Energy-Atlas Bavaria (Energie-Atlas Bayern) - Germany</a>	<a href="#">Energy Services (CT5)</a>	Project is on-going
Germany	<a href="#">Financing - KfW Energy Efficient Construction and Refurbishment - Germany</a>	<a href="#">Financing (CT4)</a>	<p>Positive Promotional Effects in 2012:</p> <ul style="list-style-type: none"> <li>• 360 000 housing units reached with promotion</li> <li>• 370 000 jobs created or secured (estimation)</li> <li>• energy savings of 2 200 GW</li> <li>• CO<sub>2</sub> savings of 770 000 t/a</li> <li>• positive effect for public budget due to tax income and social security contributions: investment activities and job creation result in a high degree of self-financing of the promotional programs due to backflow of funds to the public budget</li> </ul>
Greece	<a href="#">Saving Energy at Home - Greece</a>	<a href="#">NEEAPs (CT1)</a>	<ul style="list-style-type: none"> <li>• Contribution to the country's energy security supply</li> <li>• Increase employment</li> <li>• 1700 employers</li> <li>• 500 engineers (4 000 engineers are involved as energy inspectors, consultants, sub-contractors, etc)</li> <li>• 300 bank employers</li> <li>• Until now: more than EUR 600 million have been distributed</li> <li>• Increase population awareness regarding energy saving issues</li> <li>• Reduce energy poverty, Improve thermal comfort and quality of life</li> <li>• The average energy consumption decrease is about 43% (164 kWh/m<sup>2</sup>)</li> <li>• Energy savings accounts approximately to 1.200 euro / year</li> <li>• Total annual energy saving is estimated at 712 GWh based on the 42 780 applications completed so far</li> </ul>
Hungary	n/a	n/a	n/a
Ireland	<a href="#">The Green Plan - Ireland</a>	<a href="#">NEEAPs (CT1)</a>	<p><b>Kilbarrack Fire Station: Worlds first Carbon Neutral Fire Station</b></p> <ul style="list-style-type: none"> <li>• 92% Water reduction</li> <li>• 97% Gas reduction</li> <li>• 80% Electrical reduction</li> <li>• 100% Organic waste reduction</li> <li>• 60% Domestic waste reduction</li> </ul>

Country	Title	Theme	Outcome
			<ul style="list-style-type: none"> <li>• 5 working Bee Hives and an allotment</li> <li>• Sick Building Syndrome eradicated</li> <li>• Better place to work – Fire Crews as Stakeholders</li> <li>• Link with Retired members restored</li> </ul> <p><b>Dublin Fire Brigade</b></p> <ul style="list-style-type: none"> <li>• 44% Energy reduction across estate</li> <li>• €11M tax payer money saved</li> <li>• €3.6M investment from ring fenced fund</li> <li>• Sustainability Report signed into Dublin Law</li> <li>• First Commemorative Garden for Deceased Members created</li> </ul>
Ireland	<a href="#">Optimising Power at Work - Ireland</a>	<a href="#">NEEAPs (CT1)</a>	<ul style="list-style-type: none"> <li>• Over 270 large Central Government buildings actively participating in the campaign.</li> <li>• Average annual energy savings of 20.4% currently being achieved (Sept 2015).</li> <li>• Approximate annual cost savings of EUR 4.9 million</li> <li>• Programme now being expanded into the wider public sector.</li> </ul>

Country	Title	Theme	Outcome																																												
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Ireland	<a href="#">Energy Services - Small Medium Enterprise (SME) Business Programme - Ireland</a>	<a href="#">Energy Services (CT5)</a>	<p>On average, businesses make an 11% energy savings through this programme and the benefit is straight to the bottom line. To date businesses participating in the programme have shared savings in excess of EUR 50 million</p> <p>The key opportunities for energy savings among many participants are in the following areas. Many of these can be implemented at relatively low cost:</p> <ul style="list-style-type: none"> <li>• Energy management practices – becoming more organised about understanding &amp; monitoring energy performance and taking action to exploit opportunities for savings.</li> <li>• Lighting – switching off, changing to more efficient fittings, daylight &amp; occupancy sensors, e.g. 16% electricity saving (EUR 4,700 saving per annum) in a school by replacing light fittings;</li> <li>• Refrigeration, heating, ventilation &amp; air conditioning – designing, procuring, operating, maintaining &amp; controlling these systems more efficiently, e.g. refrigeration can account for up to 65% of consumption in the retail sector.</li> </ul> <p>Range of Savings</p> <p>Although the average annual energy saving attributable to participation in the programme is over 11%, the range of savings enjoyed by specific participants varies significantly:</p> <ul style="list-style-type: none"> <li>• 82% of participants save at least 5%;</li> <li>• Over half make at least 10% savings;</li> <li>• Nearly a third saves more than 15%.</li> </ul>
Italy	<a href="#">Renewable Technology for Improving Energy Efficiency in Greenhouses - Italy</a>	<a href="#">NEEAPs (CT1)</a>	n/a
Italy	<a href="#">TREND (Technology and Innovation for energy saving and efficiency in SMEs) - Italy</a>	<a href="#">Energy Services (CT5)</a>	<p>Almost 90 works for improving energy efficiency of SMEs.</p> <p>4 000 toe saved</p> <p>Successful promotion of a new professional skill (expert in energy management)</p>
Latvia	n/a	n/a	n/a
Lithuania	n/a	n/a	n/a

Country	Title	Theme	Outcome
Luxembourg	<a href="#">Smart Metering Project - Luxembourg</a>	<a href="#">Metering and Billing (CT3)</a>	n/a
Malta	n/a	n/a	n/a
Netherlands	<a href="#">Customer-friendly Individual Heat Metering - Netherlands</a>	<a href="#">Metering and Billing (CT3)</a>	n/a
Netherlands	<a href="#">Financing - Green Fund Scheme - Netherlands</a>	<a href="#">Financing (CT4)</a>	n/a
Netherlands	<a href="#">Friendly energy audit in the framework of Voluntary Agreement - Netherlands</a>	<a href="#">Energy Services (CT5)</a>	n/a
Poland	n/a	n/a	n/a
Portugal	<a href="#">Energy Audits - Portugal</a>	<a href="#">Energy Services (CT5)</a>	<ul style="list-style-type: none"> <li>• By the end of February 2013, DGEG (Directorate General of Energy and Geology) had approved 649 PReN (Energy Consumption Realisation Plan) which became ARCEs (Realisation Agreement for Energy Consumption).</li> <li>• The implementation of these ARCEs will lead to a reduction of 80 769 toe in energy consumption and 291 903 t CO<sub>2</sub> of GHG.</li> <li>• Excise duties exemption (ISP) amounts to around 5,9 M Euro/year.</li> <li>• Facilities that are in compliance of SGCIE are equivalent to 1,389 Mtoe and represent 24% of final energy consumption in the sectors of Agriculture and Fisheries, Mining, Manufacturing and Construction and Public Works.</li> </ul>
Portugal	<a href="#">Qualification System of Energy Services Companies - Portugal</a>	<a href="#">Energy Services (CT5)</a>	The Program aims to achieve a 30% improvement in energy efficiency in public services and bodies of Public Administration by 2020.
Romania	n/a	n/a	n/a
Slovakia	<a href="#">Measuring Impacts - Energy Saving Caluation from Highways - Slovakia</a>	<a href="#">Public Sector (CT2)</a>	We know how much energy is used in highways and that, even though energy savings are not the top priority for highway planning, there are some measurable savings which can be achieved.



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Slovenia	n/a	n/a	n/a
Spain	<a href="#">Article 4 renovation strategy - Spain</a>	<a href="#">NEEAPs (CT1)</a>	<ul style="list-style-type: none"> <li>Detailed and comprehensive overview of national building stock. Segmentation of the housing stock in building clusters according to building characteristics, which allows the definition of targeted renovation measures. Consideration of climatic zones. Clear identification of the different set of upgrading measures for the different building clusters (insulation, window replacement, heating/cooling system, etc.).</li> <li>Ambitious concept of “deep renovation”: expected saving from 70-90%.</li> <li>Clear description of current (2014) policies and programmes to support building renovation. Nearly parallel definition of policy measures (8/2013 Law, 2013 State Plan) and the process of drafting the Renovation Strategy.</li> <li>Identification of bottlenecks and precise definition of required measures for the future, in order to achieve the Strategy Objectives.</li> <li>Clear picture of the different scenarios for renovation, including total funding (private and public) required and the evaluation of impact in employment, CO<sub>2</sub> emissions, energy savings, etc.</li> </ul>
Spain	<a href="#">Energy Services - Spain</a>	<a href="#">Energy Services (CT5)</a>	Project currently under development, so far no outcome yet.
Sweden	<a href="#">Consumer Information - Local energy advice - Sweden</a>	<a href="#">Consumer Information (CT6)</a>	<p>The municipal energy and climate advisors are increasingly known and used by the target groups. Citizens are more active in making contact with them than SME's. The local advisors are, together with the regional agencies and supported with national training programmes, developing strategies and schemes to actively reach SME's.</p> <p>Recently, a survey has been conducted, where individuals who were given energy advice via telephone during 2008 and 2009 were interviewed twice, one and two years respectively after the advice was given.</p> <p>The survey showed that 78% of the interviewees had taken action to save energy (behaviour change and investment). 39% of these had made a change of their heating system, among other actions.</p> <p>The single most important source of information for these people in influencing their decisions was the municipal energy and climate advisor (26%).</p>

Country	Title	Theme	Outcome
Sweden	<a href="#">Technology procurement for the building sector - Sweden</a>	<a href="#">NEEAPs (CT1)</a>	n/a
UK	<a href="#">Article 4 renovation strategy - UK</a>	<a href="#">NEEAPs (CT1)</a>	<p>Building regulations have achieved ongoing replacement of inefficient boilers that have contributed to a significant reduction in domestic energy use.</p> <p>All of the supplier obligation targets met and exceeded as part of phases 1,2 and 3 of the Energy Company Obligation</p> <p>Implementation of the Minimum Energy Efficiency Standard Regulations for the Private Rented Sector (April 2016)</p> <p>Provision of the Energy Saving Advice Service – a telephone advice line providing independent advice on energy efficiency refurbishment – receives on average more than 20 000 calls a month.</p> <p>Step by step energy efficiency scheme “Warmer Homes Scotland” launched covering advice to installation</p> <p>Funding for household energy efficiency targeted at the worst performing homes through the Nest scheme in Wales.</p>
UK	<a href="#">Energy Services - Green Deal - UK</a>	<a href="#">Energy Services (CT5)</a>	<b>Project is on-going</b>
UK	<a href="#">Financing - EU Structural Funds and Technical Assistance - UK</a>	<a href="#">Financing (CT4)</a>	<b>Project is on-going</b>
UK	<a href="#">Use of ERDF funds in England for energy efficiency in social housing and supply chain development - UK</a>	<a href="#">Financing (CT4)</a>	<p>Delivery of project outputs, including</p> <ul style="list-style-type: none"> <li>• 410 business assists,</li> <li>• installation of 787 measures on social housing,</li> <li>• reduction of 1114 tonnes of CO<sub>2</sub>,</li> <li>• creating or safeguarding 360 jobs and GBP 20m GVA.</li> </ul>

Source: CA EED (2015) and country good practice factsheets. Available at: <http://www.ca-eed.eu/country-information>

