



**Summary of Country Reports
Submitted to the
Energy Efficiency Working Party**

Period from September 2009 to January 2010

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Summary of Country Reports Submitted to Energy Efficiency Working Party

January 2010

1 Introduction

This report provides a summary of the 18 country reports submitted by the following countries to the IEA by 26 January 2010¹:

- Australia
- Austria
- Belgium
- Canada
- Finland
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Japan
- Korea
- Netherlands
- Portugal
- Slovak Republic
- Sweden
- UK
- US

The purpose of this summary report is to highlight energy efficiency policy action and planning in IEA member countries since the last meeting of the Energy Efficiency Working Party (EEWP)² held in September 2009. This paper is not meant to be a comprehensive review of every energy efficiency-related policy in all IEA member countries.

In all of the country reports received, there is evidence of significant energy efficiency policy action. The most significant observations from these country reports cover three areas. The first is that the spending focus on energy efficiency seen in the previous two country reports (31 March and 15 September 2009) appears largely unchanged, and is still concentrated in the building sector. Second, countries are actively undertaking analysis and public consultation to plan for future projects. Third, many countries reported activity taking place in the area of fiscal policy, from amendments to new fiscal measures.

¹The **Czech Republic** reported that there were no significant changes in energy efficiency policy since the September 2009 report.

² All 28 IEA member countries are members of the Energy Efficiency Working Party (EEWP). The EEWP provides advice to the IEA Standing Committee on Long-Term Cooperation (SLT) and other IEA bodies on the means to achieve 1) highly effective energy efficiency policy development, implementation and evaluation in the IEA member countries and, where appropriate, IEA non-member countries and 2) trends, policies and priorities for maximising energy efficiency uptake.

2 Policy context changes

Only four months have passed since member countries last submitted reports, which may be why fewer member countries participated in this round of reporting.

Energy efficiency governance: Since countries last submitted reports, several countries saw changes in energy efficiency institutions. In December 2009, **Italy** established a national energy efficiency agency called the Energy Efficiency Technical Unit (UTEE). UTEE will provide technical support to key actors involved in energy efficiency and seek to improve the national energy efficiency strategy. The October elections in **Greece** led to a change in government. The new government has restructured ministries and created the Ministry of Environment, Energy and Climate Change. Ms. Tina Birbili was appointed Minister, Mr. Ioannis Maniatis was appointed Deputy Minister and Mr. Constantinos Mathioudakis was appointed General Secretary for Energy and Climate Change. After the September parliamentary elections in **Portugal**, changes occurred in the composition of the government. Of note, the Ministry of Economy and Innovation became the Ministry of Economy, Innovation and Development. Mr. Vieira da Silva was appointed Minister, and Mr. Carlos Zorrinho was appointed Secretary of State for Energy and Innovation.

Financial crisis: Countries continue to operate in the context of the financial crisis. In **Austria**, the rise in the kilometre allowance (from EUR 0,376 to 0,4) voted by the Austrian parliament to relieve consumers from the high energy price peak in the second part of 2008 was scheduled to end in December 2009. Despite the decrease in energy prices in 2009, the kilometre allowance has been continued through 2010 to help with the economic recovery. Several countries continue to provide stimulus funding for energy efficiency programmes. The federal **US** government began to distribute billions of US dollars in stimulus funds to state and local government, private businesses, consumers and researchers. Information about programmes benefitting from stimulus money in the US and in other countries will be highlighted throughout the rest of this paper.

Climate change: Several countries mentioned setting and achieving targets to decrease greenhouse gas (GHG) emissions. **Hungary** sold emissions allowances (in the form of Assigned Amount Units) worth 8.6 million tons of CO₂ to Belgium and Spain, and is using the proceeds to fund two energy efficiency building programmes (see Section 6 Innovations for more details). **Korea** announced its first mid-term GHG mitigation target in November 2009. The target seeks to cut GHG emissions by 30% from projected growth (business as usual) in 2020, or to reduce GHG emissions by 4% from 2005 levels by 2020. **Germany** confirmed its objective to reduce greenhouse gas emissions by 40% by 2020 from 1990 levels and affirmed its commitments in the European Council to use 50% of revenues raised from auctioning emissions certificates from 2013 for international and domestic climate protection projects. **Sweden** also confirmed that it would reduce GHG emissions by 40% by 2020. **Australia** reported that the Government continues to press the case for a Carbon Pollution Reduction Scheme (CPRS). In November 2009, the Senate voted, for the second time, against a package of bills to implement the CPRS. The government announced that it intends to reintroduce the bills in the February 2010 sitting period. A Prime Minister's Task Group on Energy Efficiency will report to the government by mid-2010 on options for introducing new Energy Efficiency Mechanisms that could complement the CPRS and Australia's Renewable Energy Target (RET).

3 Recent data on energy consumption and intensity

Countries credited the financial and economic crisis for declines in energy consumption in 2009. **Hungary** reported a decrease in electricity use of 6.4% in 2009. Total primary energy supply also decreased substantially from 2008 levels. Energy consumption in **Germany** fell by 6.5% over the previous year. Aggregated energy productivity (GDP per unit of primary energy use measured in GDP per GJ of primary energy consumption) improved by 1.6% in 2009. In order for Germany to reach its goal of doubling energy productivity by 2030 compared to 1990 levels, an annual improvement of 3.2% from 2010 will be necessary. In the last short-term forecast in 2009 from the **Swedish** Energy Agency, domestic energy consumption fell sharply compared to the previous forecasts. In particular, energy use within industry decreased in the forecast because of the financial crisis. In 2008, **US** energy intensity dropped more than 3% and total US energy consumption dropped by more than 2%. These changes can be attributed to increased energy efficiency and the US recession.

Several countries reported changes in energy use and intensity up to 2007. In **Sweden**, final as well as primary energy use per GDP fell by 27% between 1990 and 2007. In November 2009, **Australia's** Bureau of Agriculture and Resource Economics (ABARE) released a report called *End Use Energy Intensity in the Australian Economy*. This report found that energy consumption in end-use sectors grew by 45% between 1989-90 and 2006-07. Energy intensity, for the economy as a whole, declined by 1.1% a year over the study period. Energy efficiency gains occurred across several sectors including manufacturing, services, transport and residential. The mining and agricultural sectors, however, experienced higher energy intensities.

Austria reported limited progress decreasing energy intensity up to 2007. Austria cites low energy taxation as one reason for this. The **Netherlands** experienced a 1.1% increase in national energy efficiency over the 1995-2007 period. This is a rise of 0.1% compared with the 1995-2006 period. Energy efficiency in the agricultural sector increased since 2000, but the pace of energy efficiency improvement in the transport sector is slowing. On 21 December 2009, Natural Resources **Canada's** Office of Energy Efficiency released new energy efficiency trend data online showing an increase in total energy end-use (PJ) between 1990 and 2007.

Korea reported a steady improvement in energy intensity since 2000 thanks to the government's energy conservation and efficiency policies.

4 Significant policy developments

4.1 By sector

4.1.1 Buildings

Countries continue to pursue policies to improve building codes and energy certificate schemes. **Finland's** Energy Efficiency Committee proposed stricter energy efficiency regulations for new buildings and extended requirements for building renovations. The **Netherlands** strengthened standards for newly built houses by 25% in 2011 and by 50% in 2015 compared to the standard in 2007. As of 2017, newly built non-residential buildings have to be 50% more energy efficient compared to the 2007 standard. The Netherlands has also implemented a wide range of fiscal incentives to encourage energy efficiency in the built

environment (see Section 4.3 on fiscal policies for more information). The energy efficiency monitoring system for building energy certificates is in an advanced state of development in the **Slovak Republic**.

Several countries are providing substantial funding for residents to improve the energy efficiency of their homes. **Canada** offered CAD 300 million over two years for its ecoENERGY Retrofit-Homes Programme, and **Australia** is offering rebates for home insulation under its Home Insulation Programme. **Finland**'s Ministry of Employment and the Economy with Sitra, the Finnish Innovation Fund announced in December 2009 its plan to give 14 pilot projects providing energy efficiency advice for building renovation, households and transportation, EUR 1.9 million. The pilot projects are organised by municipalities, regional energy agencies and nationwide organisations.

Japan extended the Eco Point Program to new and renovated residential buildings (for information on the Eco Point Program for appliances, see Section 4.1.2). "Eco Points" will be issued to home owners whose buildings comply with certain standards regarding the efficiency of their windows, roof, envelope, etc. Points are exchangeable for a variety of goods. Only houses that start construction or renovation between 8 December 2009 and 31 December 2010 are eligible.

Greece, Ireland, Italy, Japan the **UK** are either performing public consultations or reviewing policies for the buildings sector. Please see section 5 on policy planning for more information. **Germany** is involved in an innovative plan to address barriers in rental law to energy efficiency improvements. **Hungary** has used funding from the sale of GHG emissions allowances to create two buildings programmes. Please see Section 6 on Innovations for more information on efforts in Germany and Hungary.

4.1.2 Transport, lighting and appliances

Transport: A handful of countries mentioned subsidies to support fuel-efficient and electric vehicles. The ecoEnergy for Fleets programme in **Canada** announced in September 2009 a one-year, CAD 1 million-pilot initiative to encourage the use of fuel-efficient technologies for heavy-duty trucks. The initiative will partially fund successful applicants up to CAD 100,000 to install SmartWay certified technologies to increase fuel efficiency. **Belgium** passed an amendment of its tax law to provide fiscal incentives for electric vehicles (see section on fiscal policies for more information).

Lighting: Two measures regarding the phase-out of inefficient incandescent light bulbs came into effect in **Australia** in November 2009. The first imposes a sales restriction based on minimum energy performance standards (MEPS) and was applied to General Lighting Service (GLS) incandescent lamps and extra low voltage (ELV) halogen non-reflector lamps and compact fluorescent lamps (CFLs). The second is a policy with an innovative two-tiered implementation structure. The **US** Department of Energy (DOE) issued updated efficiency standards for fluorescent lamps and incandescent reflector lamps. These standards are expected to result in the largest energy savings and emissions reductions of any efficiency standard ever issued by DOE.

Appliances: **Australia** has introduced new standards and labelling for new household appliances such as TVs and external power supplies and increased the stringency of other products such as air conditioners and refrigerators. For example, standards and labelling requirements for TVs imported into Australia came into effect on 1 October 2009 and more stringent standards will come into effect on 1 October 2012. **Japan** has extended the Eco

Point programme in the area of energy-efficient household appliances (terrestrial digital TV, air conditioner, refrigerator) by nine months (until 31 December 2010).

4.1.3 Public sector

Five countries, including Germany, Korea, the Netherlands, Sweden and the UK, reported on policies to improve the energy efficiency of the public sector. Act (2009:893) on energy efficient measures from authorities came into force in September 2009 in **Sweden** and prescribes that public authorities must choose two items from a list of energy efficiency measures and put them into effect. The list was created based on the requirements in the EU energy services directive (2006/32/EC). **Germany** seeks to combat climate change by reducing energy consumption and the use of natural resources in all federal IT projects. The national government in the **Netherlands** is implementing programmes to increase energy efficiency in national government buildings by 2% per year. In 2010, 100% of public procurement by national governments must be sustainable. In October 2009, DECC ministers announced that GBP 20 million would be allocated to central **UK** government departments to help them improve the energy efficiency of their real estate in order to reduce carbon emissions and financially benefit from cost savings. In **Korea**, more than 30% of existing lights at public facilities will be replaced with more energy-efficient LED (light-emitting diodes) by 2012.

4.2 Demand-side management

Just under half of the countries reported new policies to improve demand-side management. The **Slovak Republic** published two executive decrees on energy efficiency. The first details the content of an energy audit, including the set of data for monitoring energy efficiency. The second defines the content of the energy auditor exam and provides a sample energy auditor certificate.

In **Finland**, a law entered into force on 1 January 2010 creating obligations for energy companies to provide feed-back on customer's energy use and energy efficiency measures.

Korea is considering making it mandatory for energy managers to be appointed in energy-intensive companies.

Australia, Portugal and the UK are ramping up pilot projects to develop smart grids and meters. EDP Distribuicao in **Portugal** has teamed up with industrial and scientific partners to pilot a smart grid project called InovGrid. The project aims to provide electricity network information and equipment to automate network management, improve service quality, reduce operating costs and promote energy efficiency and sustainability. **Australia** announced draft guidelines for AUD 100 million National Energy Efficiency Initiative called Smart Grid: Smart City. The initiative will support the installation of Australia's first commercial-scale smart grid in partnership with the energy sector. In December 2009, the **UK** published its response to a public consultation on proposals relating to the roll-out of smart meters to households and small and medium non-domestic buildings. In particular, the government's response outlines its conclusions regarding the delivery model for domestic smart meters, high-level smart functionality requirements, provision of real-time display and information, smart functionality requirements for non-domestic meters and an implementation programme. The government concluded that the Central Communications Model offers the best solution for Britain's smart meter roll out.

The **US** economic stimulus package will fund a number of large-scale efforts to deploy smart-grid and smart-meter technologies in specific cities and regions. These efforts are predicted to

lead to a better understanding of the benefits of such technologies for load and end-use energy management and efficiency, and will likely accelerate adoption of these technologies in the US.

4.3 Fiscal policies

Several countries reported on activity taking place in the area of fiscal policy, from amendments to new fiscal measures. **Belgium** made amendments to its income tax code of 1992 to allow a 15-30% tax reduction in their tax declaration for electric vehicles. Individuals can receive a subsidy of 40% for the purchase of an external recharging station.

The **Netherlands** has implemented a wide range of fiscal incentives to encourage energy efficiency in the built environment. Measures include subsidies for energy savings advice, sustainable energy installations and improvements in energy efficiency by 4 or 5 energy label steps, glazing, and improvements to education buildings. **Canada, Australia** and **Finland** also mentioned fiscal incentives for improving the energy efficiency of buildings (see Section 4.1.1 on buildings for more information).

Some countries are reviewing or discussing revisions to their energy taxation policy. **Austria** has launched political dialogue on the issue of ecological tax reform, while **Sweden** is planning to introduce changes to its energy taxes by 1 January 2011 to reach both renewable energy and energy efficiency goals.

4.4 Multi-level governance

Four federal countries mentioned the importance of strong co-operation across levels of government. **Canada** outlined the actions its provinces and territories are taking to engage in energy efficiency. In Canada, as in several other countries, the provincial and territorial governments play an important role in delivering energy efficiency and employing tools provided by federal energy efficiency programmes to reduce energy costs, address climate change, increase competitiveness, improve air quality and general economic opportunities. Canada reported that co-ordination between the federal and provincial/territorial levels is essential for avoiding duplication and ensuring efficient programme delivery.

The **US** reported measures to improve energy efficiency policy and implementation coordination across horizontal and vertical levels of government. The Department of Energy (DOE) completed detailed Memoranda of Understanding with the Environmental Protection Agency and the Department of Housing and Urban Development in this regard. It also greatly expanded financial and technical support for state and local government efficiency programmes and regulatory efforts.

As part of the EU Energy Performance of Buildings Directive, **Italy** has established the National Guideline for Energy Certification Scheme, which includes a package of instruments aimed at harmonising the application of measures across levels of government. Italy's draft extraordinary plan for energy efficiency and energy saving seeks to achieve more effective co-ordination between key actors, strong private-public partnerships, simplified national legislation/ procedures for tackling barriers, and extension of technical support and fiscal mechanisms to relevant energy efficiency policy and technology actors.

Belgium reported that the Flemish government presented a new energy policy document covering the period from 2009-2014 to the Flemish Parliament in October 2009.

Countries continue to co-operate internationally on energy efficiency. During fall 2009, the **US** and **China** announced a joint Energy Efficiency Action Plan, which includes elements to

promote green buildings and communities, industrial energy efficiency, consumer product standards, advanced energy efficiency technology and public-private engagement. In December 2009, the Climate REDI (Renewable and Efficiency Deployment Initiative) was announced by Energy Secretary Steven Chu in Copenhagen. Climate REDI will accelerate deployment of renewable energy and energy efficient technologies in developing countries to reduce greenhouse gas emissions, fight energy poverty and improve public health. Climate REDI includes the Solar and LED Energy Access Program, the Super-efficient Equipment and Appliance Deployment Program, the Clean Energy Information Platform and the Scaling-up Renewable Energy Program (S-REP). The US also continues its support of the International Partnership for Energy Efficiency Cooperation (IPEEC).

4.5 Implementation of EU Directives

Countries are at various stages of implementing EU directives.

The UK and Greece reported progress with the European Union Energy Using Products and Energy Labelling Framework Directives (2005/32/EC). The **UK** appointed the National Measurement Office (NMO) as market surveillance authority (MSA) to satisfy 2005/32/EC Directive requirements. The MSA is tasked with ensuring that product claims under energy labelling and minimum energy standards are adhered to by manufacturers and retailers. **Greece** prepared a draft Presidential Decree concerning the harmonisation of the 2005/32/EC Directive. The draft Decree introduces the issue of implementing measures for energy using products, in order to be placed on the market and/or put into service.

Portugal and **Ireland** reported transposing the Energy Services Directive into law (2006/32/EC). **Greece** prepared a draft Law that seeks to harmonise the 2006/32/EC Directive with Greek national legislation. The draft Law provides the institutional and financial framework to improve energy end-use efficiency and to create the development and promotion of a market for energy services. **Belgium's** three regional governments signed a burden sharing agreement to work together towards achieving the 16% reduction in energy consumption by 2016 required by the 2006/32/EC Directive.

4.6 Other

4.6.1 Combined heat and power

Three countries mentioned programmes to support CHP production. **Hungary** extended its CHP subsidy programme, scheduled to end in 2010, through 2015. The **Netherlands** noted that a subsidy scheme to support large-scale industrial CHP will be implemented in 2010. The **Slovak Republic** published two executive degrees regarding CHP. The first defines details on support for renewable energy sources and CHP, and the second defines the calculation procedure for the assessment of the amount of electricity produced by CHP.

4.6.2 Fuel poverty

Two countries mentioned programmes addressing fuel poverty. In **Ireland**, EUR 76M out of the EUR 130M 2010 budget will be spent on thermal efficiency of low-income or vulnerable households. The **UK's** Chancellor of the Exchequer announced in December 2009 GBP 200 million pounds of energy efficiency measures to assist those most at risk of fuel poverty, and to support the UK's role as leader in climate change initiatives (domestically and internationally). GBP 150 million will go to Warm Front, a programme that provides better heating and insulation for 75,000 of the most vulnerable households in the UK.

5 Strategic planning

Many countries appear to be undertaking analysis to plan for future energy efficiency policies. Several countries commissioned reports to consider future policy action. In **Australia**, a Home Entertainment-Product Profile report was released for comment on 23 November 2009. The report was commissioned to consider a range of home entertainment products (video recorders, gaming consoles and various audio products) for regulation for standby and operating energy use. The report also investigates the use of a combination of policy tools to achieve potential energy and GHG savings.

Japan's Ministry of Economy, Trade and Industry (METI) commissioned the Council on 13 November 2009 to discuss Next Generation Energy and Social Systems. The Council prepared an overall concept paper on energy usage and socio-economic systems with the large-scale introduction of renewable energy. This paper covers issues including smart grids, local transport systems and urban planning. The next step will be a variety of public-private demonstration projects to promote next generation energy and social systems.

Greece, Ireland, Italy, Japan and the UK have been actively involved in policy planning for the buildings sector. In November 2009, the **UK** launched a consultation on how to balance the need for a strong economic recovery in the building sector with the need to achieve domestic and international carbon saving objectives. The consultation includes a review of a number of proposals the government has made on how to make all new domestic buildings in-line with the UK's zero-carbon definition by 2019. In December, the UK published a consultation on the proposed changes to the Code for Sustainable Homes in 2010. Also in December, the Carbon Trust published a detailed analysis of the non-domestic building sector and assessed the steps required to deliver a low-carbon building stock.

Japan's Ministry of Economy, Trade and Industry (METI) commissioned in May 2009 a committee to discuss the development and dissemination of Zero Energy Buildings (ZEBs). The Committee's report proposes a new vision for developing ZEBs in Japan by 2030. The report addresses the regulation, tax support, technical guidance, social awareness and international agreements needed to promote ZEB expansion.

Ireland completed a public consultation exercise on supplier obligation schemes and secured funding in the 2010 budget for the development of a national retrofit programme that would seek to leverage energy suppliers to deliver energy efficiency improvements in domestic and non-domestic sectors. A further consultation exercise on the scheme design is planned for early 2010 and will seek government approval to proceed with its implementation by the

middle of the year. A full roll-out of the scheme is envisioned for 2011, with a launch planned for late 2010.

The **Italian** Parliament is discussing a draft law called '*Sistema casa qualità*' (quality house scheme) that makes provisions for a voluntary scheme. This scheme would integrate the national and regional laws on energy efficiency in the building sector with the aim to harmonize legal frameworks, namely minimum requirements and technical approaches to guarantee environmental sustainability, energy savings and sustainable end-use behaviour. The draft law includes provisions for specific financial incentives to promote the voluntary scheme and for an evaluation process for getting an inventory of the Italian calculation methodologies, as well as the major European models (e.g. *Environmental product declaration* - EDP, Life Cycle Assessment - LCA, European Committee for Standardization CEN/TC 350).

Public consultation on a **Greek** draft ministerial decision introducing minimum energy efficiency requirements and a draft presidential decree concerning the accreditation procedure of buildings' energy auditors closed in December 2009.

In the **US**, substantially more stringent fuel economy standards for new light duty vehicles were issued for public review and comment in September 2009 and are expected to be finalised in the coming months.

5.1 National energy and energy efficiency strategies

Countries continue to strengthen and implement their energy efficiency strategies and action plans.

The **Slovak Republic** adopted an Energy Efficiency Action Plan with targets and proposed actions to meet the targets. Although the Slovak Republic has not yet developed a system for monitoring energy certificates in buildings, measures are in the advanced preparation phase and will gradually take place during 2010.

In December 2009, energy experts from different government and non-government groups finalised a list of demand and supply-side measures to help **Austria** fulfill its national target of 34% of electricity coming from renewable sources. These measures are now being evaluated and the final report will come out in February/March 2010. The results will serve as an input for the Energy Action Plan presented to the European Commission by the end of June 2010.

In **Finland**, a government decision on the Energy Efficiency Action Plan will likely be made in January 2010. This plan is based on proposals made by the Energy Efficiency Committee.

Portugal undertook an evaluation of its National Energy Efficiency Action Plan (NEEAP) one year after implementation began in 2008, to assess its impact on energy consumption and progress with meeting its target. Implementation of 16 measures in the Action Plan of 12 programmes was quantified, which resulted in approximately 123,892 ktoe of energy savings, or 6.9% of the target till 2015.

The basic law on low carbon and green growth was enacted in **Korea** at the end of 2009. The new law, which was passed by the National Assembly on 29 December 2009, will provide the legal basis for Korea's green growth strategy and it will go into effect from 1 April 2010.

6 Innovations/successes

Australia, Italy and Sweden conducted evaluations of energy efficiency policies and programmes, highlighting successes. In December 2009, **Australia** released a report on the achievements of the Equipment Energy Efficiency (E3) programme. According to the report, achievements included increasing the number of regulated products, conducting impact statements for the introduction of new or revised MEPS, developing new and revised standards with industry and enhancing programme enforcement and management through increased check testing and compliance activities.

In late 2009, **Sweden's** Energy Agency published four booklets covering policy success stories, including those involving refrigerators, heat-pumps and power systems. The booklets seek to show that government support, in the form of hundreds of millions of kronor in energy research and commercialisation of new technology and energy efficiency, benefits society.

A report on **Italy's** White Certificate scheme was issued in December 2009. The report found that in less than five years, the White Certificate scheme led to energy savings of around 5 Mtoe, compared with the target of 3.2 Mtoe. The report also found that consumers saved 6 to 15 times more than the cost of the incentives (for each unit of energy saved).

Japan is the only country in the world to have fuel-efficiency standards for heavy-duty vehicles. Other countries, however, have acknowledged the importance to do more in this area. **Canada**, for example, announced in September 2009 that its ecoENERGY for Fleets programme would conduct a one-year, CAD 1 million pilot initiative to encourage the use of fuel-efficient technologies for heavy-duty trucks. The initiative will provide funding of up to CAD 100,000 for successful applicants to install SmartWay certified technologies to increase fuel efficiency. Quebec is engaged in several energy efficiency projects, including the innovative public-private Energy Efficiency Centre for Excellence (C3E). This centre, launched in December 2009, will support technology transfer and commercialisation of new energy technologies. Quebec announced a CAD 7 million contribution to the project through the Energy Efficiency Agency.

Germany continues to be a leader in the buildings sector. It plans to make the CO₂ building renovation programme more effective in order to increase the current rate of building renovation. One planned action is to lower the barriers in rental law for renovations to improve energy efficiency. It hopes this action will benefit the property owner and the tenant. Germany also plans to expand the current options for the commercial supply of heating (energy contracting) in the rented residential property sector.

In December 2009, the **UK's** DECC announced it would be running five "Pay As You Save" pilot projects. The "Home Energy Pay As You Save" pilots will give households the opportunity to invest in energy efficiency and microgeneration technologies in their homes with no upfront cost, instead making repayments spread over a long enough period so that repayments are lower than their predicted energy bill savings, meaning financial and carbon savings are made from day one.

Using funds from the sale of AAU allowances to Belgium and Spain, **Hungary** created two programmes for energy efficiency. The first, a "Panel sub-programme" provides subsidies for building refurbishments. The second, "Energy efficiency sub-programme", subsidises energy efficiency investments and the use of renewable energy in residential buildings.

Japan has introduced benchmarking for industries such as steel, cement, paper, pulp, oil refinery and part of the chemical sector. Targets are set at the energy-efficiency level of the best-performing companies (top 10-20%) in each sub-sector (average value – standard deviation). Every year, companies must report progress with 1) getting closer to its benchmark 2) reducing energy intensity (by at least 1% annually) and 3) the status of its energy management system. The government monitors these reports and may take measures to ensure companies are making progress. Measures can include providing guidance, publishing the company's name on a list of under-performers and even imposing fines.

7 Challenges

Several countries reported challenges related to policy coherence, either at different levels of government, between various energy policy goals, or across scattered energy efficiency initiatives. One country found it challenging to create measures that meet multiple energy policy goals, from cost effectiveness and industrial competitiveness to sustainability. Another country maintained that converting multiple existing energy efficiency programmes into a single, recognisable identity was challenging. This country seeks to bring together existing programmes into one in order to leverage economies of scale and to strengthen the energy efficiency brand which has suffered from having too many disparate strands. The final challenge mentioned was related to energy pricing. One country mentioned that energy consumers in industrial and agricultural sectors pay energy prices that are below the international market value. Subsidies are offered to domestic coal producers and consumers. Reform of the energy price system is needed to promote a transition to a less energy-intensive economy. Cost-reflective pricing enables consumers to reduce energy consumption by sending the right price signal.

8 Conclusion

This report aims to highlight energy efficiency policy action and planning since the last EEWP in September 2009, based on the 18 reports received from member countries.

Although countries continue to operate in the context of the financial crisis, fewer countries mentioned it than in the previous two country reports. Energy efficiency policy action continues to be a priority and, with a few exceptions, significant funds continue to be dedicated to this policy area.

Country reports highlighted a strong emphasis on measures targeting the building sector. Measures encourage energy efficiency action, primarily through economic incentives, in both new and existing buildings. Countries are actively undertaking analysis and public consultation to plan for future projects, especially regarding zero energy buildings and building retrofits.

Some countries reported making progress with implementing EU Directives, while others reported developments with complementary energy and climate change policies that underscore the role of energy efficiency in meeting climate change mitigation objectives. Still others reported activity taking place in the area of fiscal policy, from amendments to new fiscal measures.

Lastly, the country reports overwhelmingly suggest a commitment to maintain or increase energy efficiency policy.