



Procedure file

Basic information		
INI - Own-initiative procedure	2007/2106(INI)	Procedure completed
Action plan for energy efficiency: realising the potential		
Subject		
3.60.05 Alternative and renewable energies		
3.60.08 Energy efficiency		
3.60.15 Cooperation and agreements for energy		

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	ITRE Industry, Research and Energy		23/11/2006
		ALDE HALL Fiona	
	Committee for opinion	Rapporteur for opinion	Appointed
	ENVI Environment, Public Health and Food Safety		14/05/2007
		PSE TZAMPAZI Evangelia	
	REGI Regional Development		07/06/2007
		ALDE BĂRBULEIU Tiberiu	
European Commission	INTA International Trade	The committee decided not to give an opinion.	
	TRAN Transport and Tourism	The committee decided not to give an opinion.	
	ECON Economic and Monetary Affairs		22/05/2007
		Verts/ALE RÜHLE Heide	
	Commission DG	Commissioner	
	Energy and Transport	PIEBALGS Andris	

Key events			
18/10/2006	Non-legislative basic document published	COM(2006)0545	Summary
06/06/2007	Committee referral announced in Parliament		
19/12/2007	Vote in committee		Summary
08/01/2008	Committee report tabled for plenary	A6-0003/2008	
30/01/2008	Debate in Parliament		
31/01/2008	Results of vote in Parliament		
31/01/2008	Decision by Parliament	T6-0033/2008	Summary
31/01/2008	End of procedure in Parliament		

Technical information

Procedure reference	2007/2106(INI)
Procedure type	INI - Own-initiative procedure
Procedure subtype	Strategic initiative
Legal basis	Rules of Procedure EP 54
Stage reached in procedure	Procedure completed
Committee dossier	ITRE/6/43156

Documentation gateway

Non-legislative basic document		COM(2006)0545	19/10/2006	EC	Summary
Document attached to the procedure		SEC(2006)1173	19/10/2006	EC	
Document attached to the procedure		SEC(2006)1174	19/10/2006	EC	
Document attached to the procedure		SEC(2006)1175	19/10/2006	EC	
Committee draft report		PE390.513	12/09/2007	EP	
Committee opinion	REGI	PE391.971	09/10/2007	EP	
Committee opinion	ENVI	PE392.128	11/10/2007	EP	
Amendments tabled in committee		PE396.492	12/10/2007	EP	
Committee opinion	ECON	PE394.031	21/11/2007	EP	
Committee report tabled for plenary, single reading		A6-0003/2008	08/01/2008	EP	
Text adopted by Parliament, single reading		T6-0033/2008	31/01/2008	EP	Summary
Commission response to text adopted in plenary		SP(2008)1176	27/02/2008	EC	
Commission response to text adopted in plenary		SP(2008)1766/2	16/04/2008	EC	

Action plan for energy efficiency: realising the potential

PURPOSE: to present a Commission Communication on an Action Plan for energy efficiency.

CONTENT: This Action Plan outlines a framework of policies and measures with a view to intensifying the process of realising the over 20% estimated savings potential in EU annual primary energy consumption by 2020. The Plan lists a range of cost-effective measures, proposing 10 priority actions to be initiated immediately, and others to be initiated gradually over the Plan's six year period. Further action will subsequently be required to reach the full potential by 2020. Realising the 20% potential 2020, equivalent to some 390 Mtoe, will result in large energy and environmental benefits. CO₂ emissions should be reduced by 780 Mt CO₂ with respect to the baseline scenario, more than twice the EU reductions needed under the Kyoto Protocol by 2012. Additional investment expenditure in more efficient and innovative technologies will be more than compensated by the more than EUR 100 billions annual fuel savings.

Even though energy efficiency has improved considerably in recent years, it is still technically and economically feasible to save at least 20% of total primary energy by 2020 on top of what would be achieved by price effects and structural changes in the economy, natural replacement of technology and measures already in place. The largest cost-effective savings potential lies in the residential (households) and commercial buildings sector (tertiary sector), where the full potential is now estimated to be around 27% and 30% of energy use, respectively. For manufacturing industry, the overall potential is estimated to be around 25%, where peripheral equipment such as motors, fans and lighting⁹ offer the most important savings potential. For transport, a similar full savings potential of 26 % is estimated, a figure which includes a significant impact from shifting to other modes of traffic¹⁰, in line with the Mid-term review of the White Paper on transport.

The Action Plan highlights key proposals and places them in a political context. These proposals take into account recently adopted legislation on EU and other levels, which has already contributed to making Europe a world leader in energy efficiency. The annex contains a comprehensive list of measures, along with a timetable. The priority actions are as follows:

Priority Action 1: appliance and equipment labelling and minimum energy performance standards. Updated and dynamic labelling and minimum energy performance standards for appliances and other energy-using equipment will be developed as from 2007 on the basis of the Labelling and the

Eco-design Directives. Special attention will be devoted to standby loss reduction. The Commission will start adopting such requirements for 14 priority product groups with a view to having all of them approved by the end of 2008. The Commission will revise the Framework Directive 92/75/EC on labelling to reinforce its effectiveness. The existing labelling classifications will be upgraded.

Priority Action 2: building performance requirements and very low energy buildings ("passive houses"). The Commission will propose expanding the scope of the Energy Performance of Buildings Directive substantially in 2009, after its complete implementation. It will also propose EU minimum performance requirements for new and renovated buildings (kWh/m²). For new buildings, the Commission will also develop a strategy for very low energy or passive houses in dialogue with Member States and key stakeholders towards more wide-spread deployment of these houses by 2015. The Commission will set a good example by leading the way, as far as its own buildings are concerned.

Priority Action 3: making power generation and distribution more efficient. The Commission will develop minimum binding efficiency requirements for new electricity, heating and cooling capacity lower than 20 MW and consider such requirements for larger production units. It will also develop with the energy supply industry guidelines on good operating practices for existing capacity to raise average generation efficiency for all plants and agree guidelines on good regulatory practices to reduce transmission and distribution losses. A proposal for a new regulatory framework to promote the connection of decentralised generation will be put forward in 2007.

Priority Action 4: achieving fuel efficiency of cars. The Commission will, if necessary, propose legislation to ensure that the 120 g CO₂/km target is achieved by 2012 through a comprehensive and consistent approach, in accordance with the agreed EU objective. In parallel it will propose to strengthen EU requirements for labelling of cars. Should it become clear that the voluntary commitments of the car industry to reach 140 g CO₂/km by 2008/2009 will not be honoured, the Commission will not hesitate to propose legislation.

Priority Action 5: facilitating appropriate financing of energy efficiency investments for SMEs and Energy Service Companies: through a number of specific initiatives, the Commission will call upon the banking sector to offer finance packages specifically aimed at SMEs and Energy Service Companies to adopt energy efficiency savings identified in energy audits. Access to Community financing, such as Green Investment Funds, co-financed by CIP, will be made available for promoting eco-innovations.

Priority Action 6: spurring energy efficiency in the new Member States. Within the framework of cohesion policy, energy efficiency is one of the priorities. The Commission will encourage European Regional Policy to deploy its national and regional programmes to promote more intensive investment to improve energy efficiency, in particular in the new Member States, including in the multi-family and social housing sectors. In addition, the Commission will promote networking amongst Member States and regions to ensure financing of best practices in energy efficiency.

Priority Action 7: a coherent use of taxation. The Commission will prepare a Green Paper on indirect taxation (2007) and will subsequently review the Energy Tax Directive to facilitate a more targeted and coherent use of energy taxation by integrating energy efficiency considerations and environmental aspects. In addition, the Commission will consider in 2007 the costs and benefits of using tax credits as incentives for enterprises, on one hand, to promote the increased production of certified energy-efficient appliances and equipment and for consumers, on the other, to promote the purchase of such appliances and equipment.

Priority Action 8: raising energy efficiency awareness. Priority areas, besides improved labelling, will include education and training plans and programmes for energy managers in industry and utilities. Included will also be teaching aids for primary, secondary and vocational educational curricula. These will be developed as of 2007 through Community programmes, by recommendations to Member States and through co-operation with Member State and Community educational agencies.

Priority Action 9: energy efficiency in built-up areas. A 'Covenant of Mayors' will be created by the Commission in 2007 bringing together in a permanent network the mayors of 20-30 of Europe's largest and most pioneering cities. The aim is to exchange and apply best practices thereby improving energy efficiency significantly in the urban environment, where local policy decisions and initiatives are important, including transport.

Priority Action 10: foster energy efficiency worldwide. In order to promote energy efficiency worldwide, the Commission will take the initiative in 2007 to reach a framework agreement with key external trading partner countries and international organisations. The agreement will focus on improving energy efficiency in end-use sectors and in energy transformation and will use a large number of policies and measures.

These measures could start producing effects in the next six years, many in the coming three. A major mid-term review will take place in 2009 during the implementation of the Action Plan. The Commission stresses that, more than anything, political will and engagement at national, regional and local level are necessary if the objectives here are to be achieved. Therefore, it is for the Council and the European Parliament and for national and regional policy makers to renew their full commitment and establish a clear and unambiguous mandate to facilitate the implementation of this Action Plan by endorsing it and agreeing on the proposals set forth.

Action plan for energy efficiency: realising the potential

The Committee on Industry, Research and Energy adopted a report drawn up by Fiona HALL (ALDE, UK) and welcomed the Commission Communication entitled 'Action Plan for Energy Efficiency: Realising the Potential'. It considered that a target of improving energy efficiency by over 20% by 2020, in addition to any improvements due to autonomous structural or price effects, was entirely feasible technically and economically.

However, Members noted with grave concern that implementation by Member States of existing legislation on energy efficiency was incomplete and behind schedule. Directive 2002/91/EC on the energy performance of buildings had been properly transposed by only five Member States. Implementation by Member States of Directive 2004/8/EC was late and far from perfect on the international market. Members censured the failure to put in place the number of Commission officials needed in order to ensure that both the Action Plan and the energy efficiency legislation on which it builds were implemented fully and promptly. They went on to deplore the fact that, of 21 Commission actions scheduled in the Action Plan for completion in 2007, only three had been fully implemented by 1 September 2007. They also deplored the severe slippage in the timetable for the adoption of minimum energy performance standards for priority product groups.

The Committee censured the failure of many Member State governments to prioritise prompt transposition of energy efficiency legislation, despite rhetoric about tackling climate change and reducing EU energy imports. It called for a frank assessment of the capacity shortfalls and other barriers which had led to inadequate implementation of energy efficiency legislation. There was also a widespread lack of simple information on energy efficiency at the point of need, which might arise suddenly (e.g. when a domestic appliance or other equipment breaks

down) or be connected with particular events (e.g. moving house). A lack of attention to the practical needs of citizens was undermining many energy efficiency schemes. ICTs should be promoted as a key element in driving forward energy saving in various sectors such as transport, construction, energy and manufacturing.

Equipment and appliances: the Committee welcomed the strategy of adopting minimum energy performance standards and called on the Commission to establish them by 2008 for air conditioning and all types of television set top boxes. Members particularly asked the Commission for the following:

- to explore ways of advancing research into LED lamps and of increasing their use;
- to establish timetables for the withdrawal from the market of all the least energy-efficient items of equipment, appliances and other energy-using products, such as patio heaters;
- to come forward with a 'one watt' stand-by performance requirement and an analysis of the potential energy savings to be made from both minimising and eliminating non-essential stand-by mode consumption, particularly passive stand-by;

Building performance requirements: the Committee urged the Commission to expedite infringement procedures against those Member States which had not properly transposed or implemented Directive 2001/91/EC. It called on the Commission to revise Directive 2002/91/EC so as to include from 2009 all buildings requiring heating or cooling, regardless of their size, and also to do the following:

- to have regard to the fact that cogeneration (micro combined heat and power) boilers are by far the most efficient, and to set minimum performance requirements for boilers accordingly;
- to propose a binding requirement that all new buildings needing to be heated and/or cooled be constructed to passive house or equivalent non-residential standards from 2011, and a requirement to use passive heating and cooling solutions from 2008;
- to consider the gradual introduction of district heating and cooling grids for all buildings to reduce fossil fuel use in heating and cooling by utilising the losses occurring in the transformation of energy;
- to consider architectural solutions for passive heating and cooling, such as construction structures with thermal properties, when considering taxation and other measures for promoting energy efficiency;
- to promote district cooling from renewable sources of energy as an efficient alternative to meeting the growing demand for comfort cooling;
- to create a transparent database of measures promoting energy efficiency in buildings, in particular financing measures, in the interests of exchanging best practice and of public information.

Power generation and distribution: NEEAPs must include an increase in high-efficiency cogeneration. Member States were asked to move to the holistic planning and fostering of electricity, heating and cooling supply, and more generally to promote measures to encourage the use of small-scale and micro cogeneration. The Commission must look unfavourably on NEEAPs which fail to do this. The Committee asked the Commission to pay greater attention to the heat market, as heat represented the largest share of energy consumption, and to instruments (urban planning, heat mapping, investment incentives) that would allow the recovery of surplus heat from renewable sources through the development of district heating and cooling infrastructures. It also asked the Commission to extend the scope of existing financial incentives to developments which enable energy produced from renewable sources to be fed into existing networks set up for fossil fuel energy.

Transport: the Committee called on the Commission to set minimum energy performance requirements for all transport modes, including public transport. The Commission was asked to launch an initiative specifically concerning urban transport and the issue of integrating climate protection, energy saving and public health in a sustainable mobility policy for towns and cities. EU cities were urged to consider measures to reduce the CO₂ emissions, for example by congestion charges. Furthermore, the Committee called for Directive 1999/94/EC to be amended in such a way as to provide for car labelling on the clear A to G format used in appliance labelling. A minimum of 20% of any space devoted to the advertising and marketing of new cars should provide information on fuel efficiency and emissions. The Commission was asked to devise a framework strategy to facilitate substantive improvements to the efficiency of urban and suburban public transport.

Financial arrangements and regional policy: the report called on the Commission to raise from 3% to a minimum of 5% the proportion of structural and cohesion funding which should be spent on improving the energy efficiency of existing homes. It regretted the complexity of much EU financing for energy efficiency, noting that the lack of simple and accessible funding constituted a huge barrier for SMEs. The Committee urged all relevant parties to take advantage of the funding available under the Seventh Framework Programme, the Structural Funds and the Competitiveness and Innovation Framework Programme/Intelligent Energy Europe, and urged the Commission to respond generously to calls for funding for research into energy efficiency. The Commission was also asked to support state aid rules that were more favourable to energy efficiency measures (such as eco-innovation and productivity improvements).

Taxation: the Council was asked to encourage the Member States to apply a reduced rate of value added tax on labour, materials and components which improve energy efficiency in buildings. It was also asked to ensure that the overall tax system reflected the aim of improving energy efficiency in buildings. The report noted that taxation fell within the competence of Member States, and that taxation measures chosen by Member States might be an element of all NEEAPs. It advocated internalisation of environmental costs. Member States were asked to introduce incentives to encourage households, micro-businesses and private landlords to pursue energy-efficiency measures and buy energy-efficient products. Tax incentives could, in certain circumstances, be available for the demolition of energy-inefficient buildings, when combined with the construction of new energy-efficient new buildings.

Changing behaviour: the Committee called on the Commission to increase research into behavioural economics and human decision-making so as to help tailor future energy-efficiency information campaigns (such as the Sustainable Energy Europe Campaign). Since energy efficiency started at home, the committee called on the Commission, the Council and Parliament to take the lead by requiring exemplary energy performance standards to be set for all EU institution buildings, as part of a wider audit of energy use by the institutions which should embrace working and travel arrangements, incentives and locations, as well as equipment and procurement. It also called on the Commission and the Member States to organise, on an annual basis, a European Action Day on Energy Efficiency.

The global dimension: Member States and the Commission must enhance international cooperation in the energy-efficiency field so as to ensure that new regulations did not fragment the global market. It acknowledged the ongoing work at technical level on shared energy-efficiency standards, particularly with China, but was concerned that this work was undermined by the lack of coordination between

Member States. Lastly, it noted the widespread concern that Russia would not be able to meet its domestic and contractual gas demand, and urged the Commission to commit greater resources to the EU-Russia Energy Efficiency Dialogue, with particular attention being paid to the upgrading of Russian district heating networks and to the utilisation of gas currently flared on oil fields.

Action plan for energy efficiency: realising the potential

The European Parliament adopted a resolution based on the own-initiative report drafted by Fiona HALL (ALDE, UK) and welcomed the Commission Communication entitled 'Action Plan for Energy Efficiency: Realising the Potential'. The resolution was adopted by 592 votes for, 26 against, and 30 abstentions. Parliament considered that a target of improving energy efficiency by over 20% by 2020, in addition to any improvements due to autonomous structural or price effects, was entirely feasible technically and economically.

However, Members noted with grave concern that implementation by Member States of existing legislation on energy efficiency was incomplete and behind schedule. Directive 2002/91/EC on the energy performance of buildings had been properly transposed by only five Member States. Implementation by Member States of Directive 2004/8/EC was late and far from perfect on the international market. Members censured the failure to put in place the number of Commission officials needed in order to ensure that both the Action Plan and the energy efficiency legislation on which it builds were implemented fully and promptly. They went on to deplore the fact that, of 21 Commission actions scheduled in the Action Plan for completion in 2007, only three had been fully implemented by 1 September 2007. They also deplored the severe slippage in the timetable for the adoption of minimum energy performance standards for priority product groups.

Parliament censured the failure of many Member State governments to prioritise prompt transposition of energy efficiency legislation, despite rhetoric about tackling climate change and reducing EU energy imports. It called for a frank assessment of the capacity shortfalls and other barriers which had led to inadequate implementation of energy efficiency legislation. There was also a widespread lack of simple information on energy efficiency at the point of need, which might arise suddenly (e.g. when a domestic appliance or other equipment breaks down) or be connected with particular events (e.g. moving house). A lack of attention to the practical needs of citizens was undermining many energy efficiency schemes. ICTs should be promoted as a key element in driving forward energy saving in various sectors such as transport, construction, energy and manufacturing.

Equipment and appliances: Parliament welcomed the strategy of adopting minimum energy performance standards and called on the Commission to establish them by 2008 for air conditioning and all types of television set top boxes. Members particularly asked the Commission for the following:

- to explore ways of advancing research into LED lamps and of increasing their use;
- to establish timetables for the withdrawal from the market of all the least energy-efficient items of equipment, appliances and other energy-using products, such as patio heaters;
- to come forward with a 'one watt' stand-by performance requirement and an analysis of the potential energy savings to be made from both minimising and eliminating non-essential stand-by mode consumption, particularly passive stand-by;

Building performance requirements: Parliament urged the Commission to expedite infringement procedures against those Member States which had not properly transposed or implemented Directive 2001/91/EC. It called on the Commission to revise Directive 2002/91/EC so as to include from 2009 all buildings requiring heating or cooling, regardless of their size, and also to do the following:

- to have regard to the fact that cogeneration (micro combined heat and power) boilers are by far the most efficient, and to set minimum performance requirements for boilers accordingly;
- to propose a binding requirement that all new buildings needing to be heated and/or cooled be constructed to passive house or equivalent non-residential standards from 2011, and a requirement to use passive heating and cooling solutions from 2008;
- to consider the gradual introduction of district heating and cooling grids for all buildings to reduce fossil fuel use in heating and cooling by utilising the losses occurring in the transformation of energy;
- to consider architectural solutions for passive heating and cooling, such as construction structures with thermal properties, when considering taxation and other measures for promoting energy efficiency;
- to promote district cooling from renewable sources of energy as an efficient alternative to meeting the growing demand for comfort cooling;
- to create a transparent database of measures promoting energy efficiency in buildings, in particular financing measures, in the interests of exchanging best practice and of public information.

Power generation and distribution: NEEAPs must include an increase in high-efficiency cogeneration. Member States were asked to move to the holistic planning and fostering of electricity, heating and cooling supply, and more generally to promote measures to encourage the use of small-scale and micro cogeneration. The Commission must look unfavourably on NEEAPs which fail to do this. Parliament asked the Commission to pay greater attention to the heat market, as heat represented the largest share of energy consumption, and to instruments (urban planning, heat mapping, investment incentives) that would allow the recovery of surplus heat from renewable sources through the development of district heating and cooling infrastructures. It also asked the Commission to extend the scope of existing financial incentives to developments which enable energy produced from renewable sources to be fed into existing networks set up for fossil fuel energy.

Transport: Parliament called on the Commission to set minimum energy performance requirements for all transport modes, including public transport. The Commission was asked to launch an initiative specifically concerning urban transport and the issue of integrating climate protection, energy saving and public health in a sustainable mobility policy for towns and cities. EU cities were urged to consider measures to reduce the CO₂ emissions, for example by congestion charges. Furthermore, Parliament called for Directive 1999/94/EC to be amended in such a way as to provide for car labelling on the clear A to G format used in appliance labelling. A minimum of 20% of any space devoted to the advertising and marketing of new cars should provide information on fuel efficiency and emissions. The Commission was asked to devise a framework strategy to facilitate substantive improvements to the efficiency of urban and suburban public transport.

Financial arrangements and regional policy: Members called on the Commission to raise from 3% to a minimum of 5% the proportion of structural and cohesion funding which should be spent on improving the energy efficiency of existing homes. It regretted the complexity of much EU financing for energy efficiency, noting that the lack of simple and accessible funding constituted a huge barrier for small and micro

businesses. Parliament urged all relevant parties to take advantage of the funding available under the Seventh Framework Programme, the Structural Funds and the Competitiveness and Innovation Framework Programme/Intelligent Energy Europe, and urged the Commission to respond generously to calls for funding for research into energy efficiency. The Commission was also asked to support state aid rules that were more favourable to energy efficiency measures (such as eco-innovation and productivity improvements).

Taxation: the Council was asked to encourage the Member States to apply a reduced rate of value added tax on labour, materials and components which improve energy efficiency in buildings. It was also asked to ensure that the overall tax system reflected the aim of improving energy efficiency in buildings. The resolution noted that taxation fell within the competence of Member States, and that taxation measures chosen by Member States might be an element of all NEEAPs. It advocated internalisation of environmental costs. Member States were asked to introduce incentives to encourage households, micro-businesses and private landlords to pursue energy-efficiency measures and buy energy-efficient products. Tax incentives could be available for the demolition of energy-inefficient buildings, when combined with the construction of new energy-efficient new buildings.

Changing behaviour: Parliament called on the Commission to increase research into behavioural economics and human decision-making so as to help tailor future energy-efficiency information campaigns (such as the Sustainable Energy Europe Campaign). Since energy efficiency started at home, it felt that EU institutions could take the lead by requiring exemplary energy performance standards to be set for all EU institution buildings, as part of a wider audit of energy use by the institutions which should embrace working and travel arrangements, incentives and locations, as well as equipment and procurement. It also called on the Commission and the Member States to organise, on an annual basis, a European Action Day on Energy Efficiency.

The global dimension: Member States and the Commission must enhance international cooperation in the energy-efficiency field so as to ensure that new regulations did not fragment the global market. It acknowledged the ongoing work at technical level on shared energy-efficiency standards, particularly with China, but was concerned that this work was undermined by the lack of coordination between Member States. Lastly, it noted the widespread concern that Russia would not be able to meet its domestic and contractual gas demand, and urged the Commission to commit greater resources to the EU-Russia Energy Efficiency Dialogue, with particular attention being paid to the upgrading of Russian district heating networks and to the utilisation of gas currently flared on oil fields.