GLASS FOR EUROPE
Europe's Manufacturers of Building, Automotive and Transport Glass

The Revision of the Energy Efficiency Action Plan

Position paper – September 2010

Glass for Europe, *the trade association for Europe's manufacturers of building, automotive and transport glass*, **urges the European Commission to rapidly equip Europe with a robust and ambitious new Energy Efficiency Action Plan**.

Glass products, particularly those in the buildings sector, are designed to significantly reduce energy consumption and associated CO_2 emissions and can make a major contribution to combating climate change. This is true for instance of energy efficient glazing solutions, which help reduce energy needs for heating and cooling buildings. Indeed, it is estimated that the EU could achieve around one third of the energy saving targets for buildings identified in the current Action Plan for Energy Efficiency, simply by introducing measures to ensure the widespread adoption of glazing equipped with both highly-insulating glass and solar-control glass[1]. State-of-the art glass also contributes greatly to renewable sources of energy with specific glass products designed to increase performances of both solar thermal and photovoltaic applications.

As an industry, glass manufacturers share the European Parliament's **concerns about the lack of progress made towards Europe's energy saving target** of 20% by 2020 and are keen to see the right framework conditions put in place to encourage more investment in and uptake of the energy efficient technologies. This paper outlines our views on how the forthcoming review of the Energy Efficiency Action Plan (EEAP) can be an opportunity for real change and what can be done to ensure that the EU's 2020 targets can be met.

About Glass for Europe

Glass for Europe is the trade association for Europe's manufacturers of building, automotive, and transport glass, all derived from the basic material known as flat glass. Flat glass is the material that goes into end-products that we see (and see through) every day. It is used to make windscreens and windows for automobile and transports, and windows and façades for houses and buildings. It is also used for many other applications like solar energy equipment, interior fittings and decoration, furniture, "street furniture" like bus stops for example, appliances and electronics, and others.

Glass for Europe has four members – AGC Glass Europe, NSG-Pilkington, Saint-Gobain Glass and Sisecam-Trakya Cam – and works in association with the company Guardian. Altogether, these five companies represent more than 90% of Europe's flat glass production.

Glass for Europe firmly believes that state-of-the-art glass can play a vital role in achieving the EU's energy saving targets and promotes ambitious policy mechanisms to support the market uptake of energy-efficient glass technologies.

[1] Independent studies show that savings of more than 100 million tonnes of CO_2 could be achieved annually if all Europe's buildings were fitted with advanced energy saving glazing such as Low-Emissivity and Solar Control Glass - TNO Report 2008-DR1240/B by TNO Built Environment and Geosciences, Delft, The Netherlands. – More information on www.glassforeurope.com

GLASS FOR EUROPE aisbl/ivzw
Rue Belliard 199/33, B-1040 Brussels - T. +32 (2) 538.43.77 - F. +32 (2) 280.02.81
info@glassforeurope.com - www.glassforeurope.com - VAT: BE 0418 828 479

Europe's disappointing record on energy efficiency

Despite the recognition of the **important potential benefits of saving energy** in terms of facilitating energy security, cutting CO_2 emissions from energy use and alleviating uncertainty caused by fluctuating energy costs, the level of political commitment to energy efficiency in Europe has been disappointing. Of the 3 core targets of Europe's climate and energy strategy, only the 20% target for energy efficiency remains voluntary.

The voluntary 20% energy efficiency target has not provided sufficient impetus to generate real change and studies show that **Europe is off-track to reach this target**[2]. A large number of the actions identified in the 2006 Action Plan have still not been implemented and the commitment from the EU has been low. This is also true of the national action plans (NEEAPs) where level of ambition and follow up has varied considerably between Member States.

This represents an important missed opportunity to save both energy and emissions at the lowest cost, as unlike other emissions reduction tools, investments in energy saving measures actually pay for themselves within a short space of time. **Europe must take the lead to benefit its economy**, particularly now that counties like the USA or China are heavily investing in energy efficiency.

Need for a new approach with a focus on building renovation

The review of the EEAP provides a unique opportunity for Europe to learn from its experiences and to build a more effective policy framework focusing on the sectors offering the highest energy saving potential.

Today, buildings account for 40% of Europe's energy consumption. If buildings are likely to remain the primary source of CO_2 emissions in the EU, such a high proportion illustrates **the high degree of energy inefficiency of Europe's buildings**. When considering glazing only, a substantial share of Europe's buildings are still equipped with single-glazing[3] whereas advanced double glazing six times more energy-efficient exist[4].

The potential for energy savings in buildings is greater than in any other sector and there are room for concrete policy interventions. By putting in place a robust framework to promote energy efficiency in buildings, the EU can not only make an important contribution to addressing climate change but also provide a boost for European manufacturing, local jobs and contribute to the well-being of Europe's citizens, **all at negative overall cost**.

In this area, Glass for Europe acknowledges that the European Union has recently adopted ambitious legislations, such as the welcome recast directive on the Energy Performance of Buildings or the reviewed directive on energy labelling with an extended scope to cover some construction products such as windows. It is critical to energy efficiency that **these legislations are implemented rapidly and consistently** across member States, unlike the original EPBD, but new areas of intervention must also be explored.

2 Fraunhofer ISI and Ecofys: 'Energy Saving 2020 – How to Triple the Impact of Energy Savings Policies in Europe'.
3 TNO is currently undertaking a study on glazing type distribution in the building stock across the EU. According to partial preliminary findings, in a country like Belgium 35% of buildings are still single-glazed.
4 Comparison between the U values of single glazing (average U value of 5.8) and that of Low-E double glazing today on the market (U value of 1.1). Further savings can be achieved by way of Low-E triple glazing, which reach U values of 0.5.

GLASS FOR EUROPE'S KEY RECOMMENDATIONS

The review of the EEAP must seek to send a clear signal to Europe's citizens so as to bring about a real step change. To achieve this objective, it is Glass for Europe's view that the new EEAP should be based on the following four areas for action.

Area for action 1: Encourage ambitious building renovation programmes thanks to the right financial instruments

Existing buildings make up the overwhelming majority of all buildings but the rate at which they are refurbished is 1.4% only. In the case of inefficient residential buildings and social housing, their inhabitants are penalised with high energy bills whereas they are the most vulnerable to fluctuating energy prices. **Encouraging energy efficiency upgrades in existing buildings can deliver huge savings at negative lifetime cost of investment**.

The barrier to overcome is the high-upfront costs. **An EU strategy must therefore investigate possible financial instruments** to support individuals, business and public authorities to make the necessary investments in large-scale deep renovation programmes. A higher proportion of EU funds should be directed to supporting energy efficiency, for example via the EU recovery plan, research and innovation spending, ETS revenue, and the Structural Funds. The recent announcement to create a specific fund for local public authorities support to energy-efficiency investments is a positive sign but its current budget of 140 million Euros must be drastically raised to reach a critical level likely to bring about changes. It should also be made easier for intermediaries to allocate EIB minimum lending amounts for local energy efficiency projects.

It must be noted that while the EPBD requires Member States to list the incentives available, it does not require new measures to be put in place. The review should therefore give clearer direction to Member States to encourage them to mobilise resources and remove barriers to funding for energy efficiency in buildings.

Area for action 2: New windows for Europe's buildings

Different types of glass developed over the years, especially low-e double glazing and solar control glazing, can significantly reduce the need for heating and cooling in buildings, thereby reducing energy consumption. Independent studies[5] show that **more than 100 million tonnes of CO_2 could be saved annually if all Europe's buildings were fitted with advanced energy saving glass**. The revised EEAP should therefore include specific actions to encourage the uptake of energy efficient technologies beyond those already enacted in the recast EPBD.

For instance, Glass for Europe suggests:

- ✓ that energy labelling schemes for windows should be developed as a priority.
- ✓ to make it mandatory to include recommendations in Energy Performance Certificates (EPCs).

[5] TNO Report 2008-DR1240/B by TNO Built Environment and Geosciences, Delft, The Netherlands

- ✓ that minimum performance requirements for windows in new buildings and for replacement, even when not taking part of a major renovation, are included in all national building codes.
- ✓ To maintain and increase fiscal incentives to replace old windows, to help unlock the barrier resulting from high-upfront costs and to encourage upgrades going beyond the minimum legal requirements

Area for action 3: Mobilizing all actors around the energy-efficiency project

More needs to be done at EU and at local level **to raise awareness about the simple and low cost solutions available** to citizens and businesses to improve the energy performance of their buildings. The EU should therefore put in place a communication strategy for the promotion of energy efficiency, including the provision of materials and guidance to the Member States and regions to encourage them to provide information on energy efficiency and building measures to their citizens. This information needs to be provided at the most appropriate local level to the recipients but with an important co-ordination and leadership role for the EU to maintain momentum.

Constructions professionals are well aware of the growing demand for energy-efficient constructions and renovations however particular actions are needed in the area of **training to ensure that a competent workforce is available** to undertake successful wide-scale renovation projects, using the wide-range of technologies already available. Although training activities are mostly a national competence, the European Commission could play a leadership role in spreading best practice across the Member States.

Last but not least, **energy utilities should be given more responsibility** in incentivising their customers to save energy. The existing directive on Energy Services does only contain loose incitements to energy utilities in this area and very little is happening on the ground. Momentum and injunction, eventually by way of the future revision of the energy services directive, are needed so that dedicated and successful programmes, such as the UK's CERT scheme, are generalised across Europe.

Area for action 4: Mandatory Energy Efficiency and Building Targets

Creating the right framework will require strong leadership at the highest political level. As part of the review of the energy efficiency action plan, the EU should consider rendering **the 20% by 2020 target a binding one to give a clear signal** to local decision-makers and to rally citizens behind the objective.

Sector specific mandatory targets, which are more tangible and can easily be monitored, must be set to benchmark progress. In the building sector, mandatory targets on the number or percentage of buildings or surfaces to be renovated yearly or on total energy savings to be achieved yearly should be introduced.

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