WWF for a living planet®

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WWF's Position Paper on the Recast of the EPBD

In December 2008, the EU agreed a package of legislation to achieve its target to cut greenhouse gas (GHG) emissions by 2020 by 20-30% below 1990 levels. The package unfortunately neglects the most immediate and cost-effective solution to reduce emissions domestically: energy efficiency. Despite the huge potential of reducing domestic emissions through energy efficiency, the package allows the target to be reached mainly by using Clean Development Mechanism (CDM) offsets in developing nations.

The recast of the Energy Performance of Buildings Directive (EPBD) still offers the opportunity to seize the saving potential in the building sector and create hundreds of thousands of new jobs. According to industry's estimations, an ambitious EPBD that captures the full potential of buildings would create up to 530,000 new jobs[1]. In addition, an innovative and efficient construction sector setting zero net energy buildings as its construction standard for the future will boost new technologies, promote renewable energies, save billions of euros for European citizens and contribute substantively to energy security and energy independence in Europe.

Our homes, our offices, our schools and all the buildings we use on a daily basis heavily contribute to GHG emissions; therefore, taking the right measures to improve efficiencies in the building sector means providing an effective solution to address climate change. The EU building sector is a large energy waster (40% of the EU final energy use) and carbon dioxide (CO_2) emitter (36% of EU CO_2 emissions), but it could be easily transformed in a climate-friendly sector. For example, if the Commission proposal to recast the EPBD is adopted as it stands, the EU final energy use would be reduced by at least 5-6% and the EU CO_2 emissions by at least 4-5%, according to the Commission's Impact Assessment[2]. Specifically, the Impact Assessment quantifies the 4-5% reduction potential as a cut of 160 to 210 Mt/CO_2 per year. According to industry's calculations, an ambitious EPBD could achieve instead up to 460 Mt/CO_2/eq reductions per year.[3] This means in practice that the **EPBD could deliver alone a reduction of CO_2 emissions of**

[1] Eurima, "U-values for a better performance of buildings" (leaflet), November 2007
[2] SEC(2008) 2864, Brussels, 13.11.2008.
[3] Eurima, "U-values for a better performance of buildings" (leaflet), November 2007.

almost twice the reduction achievable in all the sectors covered by the Effort Sharing Decision.[4]

Furthermore, the European Economic Recovery Plan,[5] which was presented by the Commission and adopted by the Heads of State and Government in December 2008 as a response to the global financial and economic crisis, recommends taking the crisis as an opportunity for a structural change towards a low carbon economy. In particular, the Recovery Plan highlights that smart investments in energy efficiency, and specifically in energy efficiency in buildings, will result in job creation and energy savings.

While the proposal to recast the EPBD introduces some positive new amendments, WWF believes that it lacks the long term vision and ambition needed to transform buildings from energy wasters into climate savers and to achieve the necessary GHG emissions reduction to keep global average temperature increases well below 2°C.

WWF therefore calls for:

- **Zero Net Energy Buildings as the construction standard from 2015 (Art. 9);**
- **Strengthening the energy performance of existing buildings through early compliance with the outcome of the calculation resulting from the Commission methodology (Art. 4, 5 and 7);**
- **The Public Sector setting the example through mandatory execution of the recommendations in the energy performance certificate (Art. 10);**
- **Fiscal and/or financial incentives for homeowners for up-front investments (New Article); and**
- **Effective enforcement and monitoring of implementation of the EPBD (Art. 17, 22 and Annex II).**

If the EU is serious in tackling climate change, energy conservation measures in buildings must be at the heart of its domestic climate and energy policy. With the recast of the EPBD, the EU has the opportunity to adopt an effective legislative tool to easily achieve the 20-30% emission reduction target by 2020 and ensure a safer energy future for the EU.

WWF is confident that its suggestions will positively contribute to the debate on the EPBD, and calls the European Parliament and the Council of the European Union to adopt the recast directive by the end of 2009.

[4] COM(2008)17 final, Brussels, 23.1.2008.
[5] COM(2008)800 final, Brussels, 26.11.2008.

1. Zero Net Energy Buildings as the Construction Standard from 2015 (Art. 9)

The technology to build new efficient buildings that produce the same amount of energy they consume is already available and well functioning; however, its uptake in the market is still low mainly because buildings' owners are not fully aware of the possibility offered by zero energy technologies; architects and designers are not adequately trained to design highly efficient buildings; and the upfront costs are still significant. The EU must guide the transformation in the building market by setting zero net energy buildings as the construction standard for all new buildings after 2015. Only if the EU clearly sets **zero net energy buildings as its vision for the future**, the actors in the construction sector will have planning certainty and ensure the necessary long term investments to make this vision a reality.

Zero Net Energy Buildings

Although a common accepted definition of zero net energy buildings does not exist, when using this expression WWF refers to a building that produces as much energy as it consumes over the course of a year through on-site renewable energy. In particular, a zero net energy building uses energy from the grid in periods of under production and sells back energy to the grid in periods of surplus; as a result, the building has zero net energy consumption over the year.

The Commission proposal to recast the EPBD only requires Member States to draft national plans to increase by 2020 their minimum share of buildings that have both CO_2 emissions and primary energy consumption low or equal to zero. While WWF supports the introduction of national plans, we believe that the final aim of each national roadmap should be **setting zero net energy buildings as the performance goal by 2015 for all new buildings**. The proposed obligation of increasing national shares of low/zero energy and carbon buildings does not establish the level of ambition Member States need to achieve and it does not send the appropriate signal to the actors involved.

In addition, WWF stresses that the EPBD core objective is to minimize the energy used in buildings and, as a result, to reduce GHG emissions. Emission cuts should be achieved in first place through energy efficiency and then by introducing renewable energy sources to cover the energy needs of a building. However, energy efficient measures should always be the first step as it is not acceptable to have an inefficient building stock that wastes energy, including low carbon energy.

2. Upgrading Energy Performance of Existing Buildings (Art. 4, 5 and 7)

Improving the energy performance of existing buildings is the priority as they are main energy wasters and constitute nearly the entire building stock (there is only around 1% of new constructions that are added to the total building stock each year).

WWF recommends (i) using the benchmark system[6] proposed by the Commission only for existing buildings, and (ii) requiring **Member States to review their building codes by 2014 at the latest to meet the cost optimal levels of energy performance requirements resulting from the Commission methodology**. Moreover, the methodology should be shaped to calculate energy performance requirements that are not only achievable at a reasonable cost, but also demanding in term of energy savings; the methodology should also take into account the climate change mitigation benefits. WWF will strongly support a methodology that will give as a result cost-optimal level of minimum energy performance requirements in line with low energy standards.

WWF welcomes the proposal to extend the recast of the EPBD to all existing buildings irrespective of their size, as the deletion of the 1000 m^2 threshold will capture the energy reduction potential of all existing buildings. These positive effects, however, will be diminished because the definition of major renovation will keep covering only significant retrofitting in term of cost or dimension. For example, the recast EPBD may still leave out retrofitting of a single apartment in a big multifamily building and stand alone renovations in residential houses. WWF calls for **eliminating the definition of major renovation**: each energy-related retrofitting and substitution of energy-related component, even if of a limited size, should be seen as an opportunity to upgrade energy efficiency and, therefore, no restriction linked to the scale of the refurbishing should be included in the recast EPBD.

In addition, WWF suggests including in the EPBD also those residential buildings that are intended to be used less than four months per year (Article 4.2.d). **Buildings that are not regularly used should also comply with energy efficient requirements**; this is because (i) a huge amount of energy may be wasted even if the building is not occupied through the all year, and (ii) it is difficult to anticipate before the construction of the building itself for how many months it will be effectively used.

3. The Public Sector must set the Example (Art. 10, 11)

The public sector must be at the forefront of energy efficiency in its building stock. Buildings owned by public authorities must be the model for all other constructions.

WWF supports the Commission proposal requiring buildings occupied by public authorities to comply early with the provisions of the EPBD. However, the recast EPBD could still substantially strengthen the leading role of the public sector. For example, public authorities should always be required to **compulsorily carry out the cost-effective recommendations listed in the energy performance certificate for public buildings**.

[6] The benchmark system allows a comparison between the minimum energy performance requirements resulting from each national methodology and those resulting from the methodology drafted by the Commission. The Commission proposal requires that from 30 June 2017, when a MS decides to review its minimum energy performance requirements, it must ensure that its new requirements meet the results of the calculation of the Commission's methodology.

In addition, buildings of more than 250 m^2 frequently visited by the public should also be required to always be certified and to always display the energy performance certificate.

4. Incentives for Up-front Investments are the key to Success (New article)

Investments for energy conservation measures in buildings make an economic sense as in a period of few years the decrease of energy bills repays, or even exceeds, the initial investment. However, lack of up-front financing remains one of the major barriers to carry out retrofitting in existing buildings or to build new efficient houses.

To help closing the financial gap, the recast EPBD shall require Member States to provide building owners with fiscal or financial incentives to invest in energy efficiency. Each Member State should select the measures that are the most appropriate to its national situation; possible instruments could include fiscal rebates on income or property taxes, low interest loans, or direct subsidies. In addition, financial or fiscal incentives should support the execution of the recommendations included in the energy performance certificate.

The European Economic Recovery Plan[7] also recognizes the importance of tackling financial barriers by calling Member States and industry to urgently develop innovative financing models to support efficiency in the sector.

5. Effective Enforcement and Monitoring is Needed (Art. 17, 22 and Annex II)

Effective enforcement of the EPBD is crucial to its success; even the most advanced legislation is useless if compliance with the requirements is not accurately monitored and non compliance is not severely punished. For this reason, WWF welcomes the proposal to introduce effective, proportionate and dissuasive penalties for the infringement of national legislation transposing the EPBD.

Furthermore, WWF believes that the proposal to recast the EPBD could be significantly improved on the independent control system of the energy performance certificates and inspection reports. A random check of at least 0.5% of all the energy performance certificates issued and of 0.1% of the inspection reports seems inappropriate to ensure the reliability and the good quality of these documents. According to the Commission's Impact Assessment[8], an independent expert releases about 200 certificates per year; therefore, a random check of 0.5% corresponds to verifying on average the quality of one certificate per independent expert per year.

WWF suggests carrying out **a random check of at least 0.5% of the certificates issued annually by each expert** (not 0.5% on the total amount of the certificates), or of at least one certificate for those experts issuing only few certificates. This will ensure that all the independent experts are regularly controlled. If the validity and quality check described above **shows non compliance, the competent authority should carry out further**

[7] COM(2008)800 final, Brussels, 26.11.2008.
[8] SEC(2008) 2864, Brussels, 13.11.2008, page 47.

random checks of five additional certificates already issued by the same expert; if also in this case quality requirements are not met, penalties should be imposed on the expert. In particular, the most serious infringements should be punished with the withdrawal of the expert's accreditation for a certain period of time. A comparable system should also be foreseen for the validity and quality checks of the inspection reports.

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The EU needs to prove the climate leadership it claims and must not rely on CDM offsets in developing countries to achieve the emission reductions set for 2020. Securing a long-term focus on energy conservation puts a clear obligation on EU governments to boost investments in energy efficiency and ensure that non-ETS sectors contribute to the GHG emission reduction target in a fair way.

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