



October 19, 2012

Signing of the agreement "Liabilities 2015"

**Speech by Evelyne Huytebroeck,
Minister for the Environment,
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(translated from French to English with Google Translation)

Hello everyone,

This is a particularly important moment that we are witnessing together today. The culmination of the energy policy that I am working to achieve in the Region in Brussels since 2004. Today, the players in the construction sector are committed to my agreement, to apply the "Passive 2015" agreement: any planning permission for the construction or renovation of a dwelling, an office building or of a school introduced after **1 January 2015** must comply with the passive standard.

It is truly a revolution. The Brussels Region will be the first region in the to adopt this standard, which makes it possible to divide the heating bill by ten building compared to a conventional construction. We anticipate the European Union will impose it in 2021. We can be proud of it, whereas, just ten years ago, Brussels had the reputation of being an energy strainer. Times have changed: we are now in the top three passive cities / regions in Europe.

If it is a revolution, it is nevertheless a gentle revolution since we for many years, hand in hand with all the players in the sector. A working group has been formed to concretize this **concerted agreement**. The atmosphere was truly constructive and everyone wanted to reach consensus. Listening has been used as a guideline and we have taken into account all the comments of the sector this passive standard lends itself to all building configurations. Our objective was to obviously that this standard be applicable, realistic and effective. A derogation regime has where the building configuration is unfavorable (see annex).

A gradually progressive revolution that we have been leading since 2004, have put in place our **ambitious energy efficiency policy**. Because, in addition to the energy performance requirements for new buildings, it is essential to act on the existing structures. We have therefore implementation of many instruments, encourage demand and, on the other hand, stimulate the supply of the construction sector. This was made possible by financial incentives (energy bonuses, calls for projects "Exemplary buildings", certificates green, Brussels Green Loan, etc.), measures to accompany the sector (training, awareness raising, facilitators, technical guides, etc.)

and specific projects (Energy Challenge, Program BEACH ...). The impact is undeniable: energy consumption per capita between 2004 and 2010 decreased by 18% ! Any benefits for the environment and for wallet.

All the policy in this area has been rewarded with a European Award in the framework of the European Sustainable Energy Week last June. The passive standard is thus an integral part of this voluntarist energy policy. From 2007, through the call for projects "Buildings exemplaires", which rewards buildings for energy performance, we have encouraged builders to opt for this standard. As early as 2010, the regional public authorities since the passive standard has become the norm for any housing construction social (SLRB) or average acquisitive (SDRB). To date, the Region of Brussels **500,000 m² , half a million m² of passive buildings** , built, in the course of construction or planned.

Thanks to this incentive period, which allowed the liabilities to enter the mentalities and practices, that we will be able to adopt this standard by 2015 for all new construction. At that time, the construction industry will benefit from an **experience of ten years** ! It is therefore perfectly prepared to cross this course. I would welcome the construction sector, which had been able to meet the many challenges that have been faced in recent years. It is thanks to the way he has accomplished and to the know-how it has developed to be at the forefront on energy performance issues - that we can now adopt the passive standard in Brussels.

The impact of adopting the passive standard in Brussels will be enormous. Imagine: there is, in Brussels, **210,000 m² of tertiary buildings and 200,000 m² of newly built residential buildings** . The potential for savings is impressive: **15,000 tonnes of CO₂** each year, which corresponds to a of **€ 5 million** on the energy bill. Without forgetting the gain in terms of comfort for occupants. Anyone who has ever lived or worked in a passive building can testify that this environment is particularly pleasant, comfortable and healthy.

I repeat: today is a day to mark with a white stone for the Region Brussels. And I would like to thank the entire construction industry, the federations, promoters, architects, entrepreneurs, for their dynamism, their vision of the future, their capacity for adaptation and renewal, to make this revolution possible. Grace to the "Passive 2015" agreement, Brussels continues its transformation into a Sustainable City. Thanks to you and together.

Evelyne Huytebroeck

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Technical Annex

Any planning permit for the construction or major renovation of a dwelling, Office or a school introduced after January **1, 2015**, must comply with the passive standard. A derogation regime is also provided where configuration of the building is unfavorable.

1. For HOUSING, new construction or demolition / reconstruction

The PEB requirements to be met are as follows:

- a. A net heating requirement less than or equal to 15 kWh per m² per year (ten times less than the consumption of a conventional building);
- b. A primary energy consumption for heating, hot water and less than or equal to 45 kWh per m² per year (five times less than consumption of conventional housing);
- c. An overheating temperature which can not exceed 25 ° C only for 5% of the Time of year.

For all urban planning permits introduced from 1 January 2018, a requirement Air-tightness at 50 Pa less than or equal to 0.6 volume per hour.

When the configuration of the housing is unfavorable, namely low solar contributions (Shading, poor orientation) and / or poor compactness, a automatic **derogation** regime is set up. The requirements to be met are: at. A net heating requirement less than or equal to X kWh per m² per year, where the net heating need is calculated with:

- $U_{\text{average, weighted}}$ by 0.12 W / m² K for the opaque walls
 - $U_{\text{average, weighted}}$ 0.85 W / m² K for all windows and doors
 - An air tightness at 50 Pa equal to:
 - 2015 1 vol per hour
 - 2016 0.8 vol per hour
 - 2017 0.7 vol per hour
 - 2018 0.6 vol per hour
 - A ventilation system with a recovery efficiency of 85%
- And by default a good setting of the installation ($m_{\text{heat, sec } i} = 1$)
- Any other parameter to be encoded is realistic compared to the case studied

b. Primary energy consumption for heating, domestic hot water and electric auxiliaries less than or equal to $45 + 1,2 * (X - 15)$ kWh per m² per year.

2. For HOUSING, heavy renovation

In the case of **renovations of at least 75%** of the leakage area of the including the replacement of all technical installations, requirements to be respected are the same requirements as for new housing with the application of a margin of flexibility of 20% (except on the requirement of overheating). This margin of flexibility of 20% also applies to the requirements of the derogation scheme cited above.

3. For OFFICES and SCHOOLS, new or demolition / reconstruction

The PEB requirements to be met are as follows:

- a. A net heating requirement less than or equal to 15 kWh per m² per year (five times less than the consumption of a conventional office building);
- b. A net cooling requirement less than or equal to 15 kWh per m² per year (five times less than the consumption of a conventional office building);
- c. A primary energy consumption for heating, cooling, lighting and electrical auxiliaries less than or equal to $(95 - 2.5 * \min(C; 4))$ kWh per m² per year, C being defined as compactness, that is to say the ratio between the protected volume and the area of wastage (five times less than the consumption of a conventional office building);
- d. An overheating temperature which can not exceed 25 ° C only for 5% of the Period of use.

For all urban planning permits introduced from 1 January 2018, a requirement An airtightness at 50 Pa less than or equal to 0.6 volume per hour.

When the configuration of the tertiary building is unfavorable, ie low intake of solar radiation (shading, poor orientation) and / or poor compactness, **Derogation** is put in place. The requirements to be met are:

a). A net heating requirement less than or equal to X kWh per m² per year, where the net need heating is calculated with:

- $U_{\text{average, weighted}}$ by 0.12 W / m² K for the opaque walls
- $U_{\text{average, weighted}}$ 0.85 W / m² K for the set of windows and doors

➤ An air tightness at 50 Pa equal to:

2015 1 vol per hour

2016 0.8 vol per hour

2017 0.7 vol per hour

2018 0.6 vol per hour

➤ A ventilation system with a default recovery rate of 75% and by default a good setting of the installation ($m_{\text{heat, sec } i} = 1$)

➤ Any other parameter to be encoded is realistic compared to the case studied

b. A primary energy consumption for heating, cooling, Lighting and electrical auxiliaries less than or equal to $(95 - 2.5 * \min(C; 4)) + 1,2 * (X - 15)$ kWh per m^2 and per year, C being defined as compactness, that is to say ratio between the protected volume and the area of loss.

4. For OFFICES and SCHOOLS, heavy renovation

In the case of **renovations of at least 75%** of the leakage area of the including the replacement of all technical installations, requirements to be respected are the same requirements as for the new tertiary sector of a margin of flexibility of 20% (except for the risk of overheating). This margin of flexibility of 20% also applies to the requirements of the derogation scheme cited above.