

Report under Article 9(1) of Directive 2010/31/EU of the European Parliament and of the Council on the energy performance of buildings

The national targets in respect of nearly zero-energy buildings are included in chapter 3.4 of the document titled “2nd National Energy Efficiency Action Plan of Hungary until 2016 with an outlook to 2020”, which was adopted by way of Government Decree No 1374/2011 (XI.8.) and submitted previously to the European Commission.¹ Please find attached the decision-preparatory study drawn up for the identification of the energy requirements for nearly zero-energy buildings, which serves as a basis for the professional debate on the requirements to be set.

The following sections provide preliminary information about the basic principles of promoting nearly zero-energy buildings in Hungary. Detailed mechanisms will be included in the National Strategy for the Energy Performance of Buildings which, is currently under preparation.

PROVISIONS:

The obligation of preparing a national action plan is set out in Article 9 of² Directive 2010/31/EU (of 19 May 2010) of the European Parliament and of the Council on the energy performance of buildings (hereinafter referred to as the ‘Directive’).

“Article 9 Nearly zero-energy buildings

(1) Member States shall ensure that:

- (a) by 31 December 2020, all new buildings are nearly zero-energy buildings; and
- (b) after 31 December 2018, new buildings occupied and owned by public authorities are nearly zero-energy buildings.”

The energy performance of buildings is one of the priority fields of Community policies. The Directive, inter alia, stipulates that only nearly zero-energy buildings may be constructed as of 2020 – and in case of public institutions as of 2018. Another mandatory provision is that after 2012 no construction or renovation may be supported unless it meets the minimum requirements set by the European Commission. Furthermore, the European Economic Recovery Plan of March 2009 also requires Member States - in connection with the establishment of low-carbon economy and society - to retrofit buildings to improve their energy performance and to invigorate the relevant sections of the labour market.³

OBJECTIVE:

Currently we have no exact information on the number of nearly zero-energy buildings and buildings with low energy demand, however, their number in Hungary is assumed to be very small (approx. a few hundreds at most). Based on the usual pace of construction, the construction of approx. 30 000 to 60 000 new buildings can be expected annually following 31 December 2020, with four-fifth being residential buildings. The demand for the construction of buildings with low energy demand is expected to rise significantly between 2015 and 2020.

It will be appropriate to set substantial growth targets for the construction of buildings with low energy demand by 2015 mainly in the case of new public buildings and new residential buildings that are originally intended to be let. The **New Széchenyi Plan** contains reference to

¹ http://ec.europa.eu/energy/efficiency/doc/end_use/2011_neeap_original.zip

² Official Journal L 153, 18/06/2010 p. 0013 - 0035

³ The economic development programme of the Hungarian government: New Széchenyi Plan, page 136

this goal: “The financial aids promoting home ownership must be linked to the number of children in the family, to income tax, to energy efficiency and to lawful and high-quality construction.”⁴

The annual number of new buildings with low energy demand can be estimated at approx. 100 to 1000 by the middle of the decade.

The actual target figures of the policy are set out in Chapter 2.2, Energy Efficiency of the New Széchenyi Plan:

Several scenarios were prepared in the framework of energy efficiency improvement projects, on the basis of which impact assessments concerning energy economy, macro-economy and climate protection have been drawn up. Taking into account these assessments the following policy target values are recommended for the period between 2011 and 2020:

the average energy saving of projects should be at least 60%;

the aid for new buildings should encourage the construction of buildings which surpass the requirements pertaining to energy performance, the target value of which is 25 kWh/m²/year (for heating).

Lowering the energy consumption of buildings is important as regards national strategy because it reduces Hungary’s reliance on imported energy resources, mitigates foreign trade balance gap, improves competitiveness and lowers the energy bills of families and public institutions at the same time, thereby relieving the national budget, creating jobs, facilitating the strengthening of the domestic building construction SME sector and contributing to the fulfilment of international obligations undertaken in the field of climate protection.

Resolution OGY 77/2011 (X.14.) on the **National Energy Strategy** also touches upon the issue of nearly zero-energy buildings by stipulating that the tasks of the Government shall include “drawing up a strategy concerning the energy performance of buildings in order to improve the energy parameters of the building stock, with particular regard to support schemes, the energy and cost analysis of modes of heating and insulation and the promotion of nearly zero-energy buildings.”⁵

INCENTIVE PROGRAMMES FOR ACHIEVING THE TARGETS:

The New Széchenyi Plan establishes the main lines of incentive schemes:

‘NEW GREEN HOME BUILDING’ SUB-PROGRAMME. The aim of the grant for newly built homes is to encourage the construction of buildings which surpass the requirements pertaining to energy performance. The current Hungarian requirement is category C, which is mandatory for new buildings. Since category B is better than category C by only 5% to 25% in terms of energy efficiency, the promotion of categories A (better than the minimum requirement by 25% to 50%), A+ (better than the minimum requirement by more than 50%) and A++ is appropriate. The measure promotes the construction of energy-efficient residential buildings constructed using traditional or energy-intelligent technologies.

‘LIVEABLE ‘PANEL’ HOMES’ RENOVATION SUB-PROGRAMME. The aim of the sub-programme is to modernise the energy performance of homes in blocks of flats built from pre-fabricated concrete blocks, combined with the renovation of the built environment, which partly covers the blocks built prior to 1992 using energy-wasting technology (mostly of which are connected to district heating and do not meet today’s thermal technology requirements).

⁴ New Széchenyi Plan Home Projects, page 33; http://ujszecenyiterv.gov.hu/strategia_leiras

⁵ Resolution OGY 77/2011 (X.14.) on the National Energy Strategy point 4, subparagraph (h)

The aim for these buildings is to encourage complex renovation leading to energy savings of at least 60%, and thereby reducing the energy use of residential buildings. The measure facilitates the complex energy-efficient renovation of residential buildings. The beneficiaries of the grant are the owners and communities, as aid is provided directly to citizens.

‘DISTRICT HEATING EFFICIENCY’ SUB-PROGRAMME. The aim of the measure is to renovate district heating systems in the most complex way in terms of energy efficiency. Low-efficiency district heating systems have a huge impact on the energy performance classification of the buildings they serve, which makes the energy performance audit and the assessment of the efficiency of the renovation of district heating systems of the utmost importance. The sub-programme supports energy performance audits, the introduction of renewable energy resources and improving the efficiency of existing systems.

‘OUR HOME’ RENOVATION SUB-PROGRAMME. The programme covers traditionally built single-family houses and multi-occupied residential buildings built prior to 1992 using now-obsolete technology, which do not meet today’s thermal technology requirements. Therefore the aim is to modernise the energy performance of traditionally built properties and to complex renovation leading to energy savings of at least 60%, and thereby reducing the energy use of residential buildings. The measure facilitates the complex energy-efficient renovation of residential buildings (single-family houses, row houses, multi-occupied residential buildings, etc.) constructed by traditional technologies. The beneficiaries of the grant are the owners and communities, as aid is provided directly to citizens.

‘RENEWED PUBLIC INSTITUTIONS’ SUB-PROGRAMME. (Green institutions funded from the state budget, public institutions of green local governments.) The programme covers energy-wasting buildings of the central government or of local governments, which serve public functions, were built using traditional technology or from pre-fabricated concrete blocks, and do not meet today’s thermal technology requirements (health care institutions and facilities, sports facilities, spas and spa facilities, educational-pedagogical institutions, social institutions, agencies, cultural and recreational institutions, etc.). Public buildings owned by the State of Hungary are the largest energy consumers out of all buildings; therefore it is a priority goal to significantly reduce their energy use on the short and medium term and to improve energy savings, while applying the principles of rationality and economy to the greatest extent.

Similarly to the schemes listed above, energy savings of at least 60% must be achieved for these buildings too by promoting complex renovation (energy performance modernisation of building envelopes, energy systems and building engineering systems, installation of thermal energy and electricity production capacities using renewable resources), thereby lowering the energy consumption of public buildings. Achieving these goals can be expected to lead to a significant reduction in national expenditures as well. Another goal for complex renovation is that the retrofitting of buildings be connected to the climate protection objectives and especially the use of renewable energy technology. The institutions targeted are frequently visited by the public; thus, their renovation could be an important vehicle for raising awareness, education and demonstration. Several EU Directives in effect require that frequently visited public buildings set an example in the field of energy efficiency (Directives 2006/32/EC and 2009/28/EC).”⁶

⁶ New Széchenyi Plan, pages 144 and 145

New Széchenyi Plan – ‘RESIDENTIAL SECTOR_MODERNISATION OF HEATING’ - SUB-PROGRAMME

The goal of the programme, which was announced in 2012, is the purchase and installation of heating systems using condensation boiler technology and/or renewable energy in order to improve the energy efficiency and reduce the carbon-dioxide emission of existing buildings (advances heat supply systems for the heating of buildings or for the generation of hot water, or multifunctional systems combining the aforementioned functions).

Residential buildings involved in the grant scheme must be classified at least in category “E”, and must advance to at least category “C” as a result of the renovation. Residential buildings which already met the energy performance requirements of category “B” when submitting their application must advance to category “A+”, which must be achieved through a heat generation system using renewable energy.