



ROUNDTABLE ON FINANCING ENERGY EFFICIENCY IN HUNGARY

**13 October
2020**

Virtual Event

Event organised in the framework of the Sustainable Energy Investment Forums, funded by the Horizon 2020 programme of the European Union



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VIRTUAL EVENT, 13 OCTOBER 2020

This event was organised by the European Commission in collaboration with the Central Bank of Hungary (MNB), in the framework of the Sustainable Energy Investment Forum, funded by the European Commission's Horizon 2020 programme.

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EXECUTIVE SUMMARY

The virtual roundtable gathered 65 participants working on energy efficiency finance from European institutions, national governments, support scheme managing authorities, and the financial, energy, and energy efficient and sustainable construction sectors. A total of 30% of the participants represented the finance sector.

The roundtable was divided into an introductory plenary session and three thematic breakout sessions.

The introductory plenary session included a keynote speech from Mr Péter Kaderják, State Secretary for Energy and Climate Policy (Ministry of Innovation and Technology), updates from the European Commission (DG ENERGY and DG REGIO) and the European Investment Bank, as well as presentations from the Central Bank of Hungary (MNB) and the Hungarian Banking Association.

The three thematic breakout sessions focused on green transition at the forefront of economic recovery; the need to make energy efficiency attractive for the financial sector; and the need to establish integrated home renovation services to assist homeowners throughout the whole project journey. The sessions were introduced by presentations on best practice examples from abroad and presentations on the current Hungarian situation. Prior to the event a background paper on the three topics was distributed among participants, allowing them to come prepared to the session discussions.

The main conclusions and recommendations from the three breakout sessions are summarised below.

Session 1: Green transition at the forefront of economic recovery

- The green economic transition, along with the digital transition, is regarded as a key driving force for economic recovery and sustainable growth.
- A dynamic market uptake in the residential sector that targets deep energy renovation cannot be triggered without public grants and credit guarantee instruments. Given the enormous potential of the residential building stock in terms of contributing to achieving the national energy saving and climate targets, more attention should be paid at policy level, and it should be supported by appropriate financial instruments.
- The Energy Efficiency Obligations (EEO) Scheme to be launched in 2021 is regarded as a good opportunity to support energy efficiency improvements in the residential sector. The potential added value from residential energy retrofits should be considered from a legal perspective.

Session 2: Making energy efficiency investments attractive to the financial sector

Energy efficient mortgages

- The Energy Efficiency Data Protocol and Portal (EeDaPP) should be promoted to other one-stop-shop (OSS) initiatives to establish links with projects that efficiently collect data relating to energy efficient mortgage assets on a large scale via standardised reporting methods (EeDaPP is related to the Energy Efficient Mortgages Initiative).

- Providing information to consumers and banks on the availability and reliability of the installers completing the renovations is a key issue to be addressed (quality of work, quality of products/equipment to be built in, qualifications of the installers).
- The standardisation of contracts is imperative from the point of view of banks and energy service companies (ESCOs), but also for consumers.
- The creation of a national hub on energy efficiency financing in Hungary that would act as a consultative forum is regarded as a particularly good incentive. A roundtable to address its rationale and viability in detail is recommended.

On-bill financing

The applicability of the model and the related market needs should be assessed in Hungary. Key issues to be tackled include:

- regulatory framework for lending/leasing by utilities or SPVs in Hungary;
- invoices for lending/leasing or service components, including VAT aspects; and
- legal guarantees for transferring the repayment obligations to the new owners (object-based finance).

The model must be incorporated into the legal/tax framework; potential changes to regulations should be discussed and recommended.

Commercial banks' perspective

To overcome barriers from the perspective of the commercial banks, the following solutions need to be implemented:

- the appropriate criteria for environmental, social and governance (ESG) qualifications should be elaborated, standardised, and incorporated in the qualification and risk management procedures of banks;
- the criteria on green client qualifications need to be elaborated, standardised and incorporated into the standard procedures;
- data need to be collected on the performance of EPCs, ESCOs, and energy efficiency measures – and should be made accessible (in the context of GDPR requirements);
- the risk evaluation process should be standardised, including the incorporation of the green aspects into the standard risk assessment and product development procedures (which might trigger amendments to the laws and regulations concerning financial institutions); and
- extensive capacity building regarding ESG and green qualification criteria.

Session 3: Integrated home renovation services

- Grant support in line with European standards needs to play a prominent role in the energy retrofitting of buildings in the long term, provided that a comprehensive residential building energy renovation is planned for and realised (which is the declared goal). The Irish example shows that public support for this is positioned at 30–35%.
- Long-term financial predictability is needed for public funding programmes and delivery systems, and to attract financing from commercial banks.

- It is necessary to consider the interests of all actors along the renovation value chain (which, one often forgets, also includes the contractors and the financiers – their specific motivations and business interests should be acknowledged).
- There are currently not enough specialist staff available to meet renovation needs. Training and education for all the stakeholders in the building retrofit value chain is required at a large scale.
- The specific interest expressed by the representatives of local governments in cooperating with RenoHUB (Horizon 2020 (H2020) PDA project) is particularly welcome.

Copies of the presentations can be found at the [event site](#).

BACKGROUND TO THE EVENT

As part of the Sustainable Energy Investment Forums (SEIF) initiative, the European Commission is organising a national roundtable in Hungary to enhance the capacity of public and private stakeholders to develop large-scale investment programmes and financing schemes, and to encourage cooperation between them. The SEIF arranged more than 30 events in 14 Member States between 2016 and 2019; information on past and upcoming events can be found on the SEIF [webpage](#).

The national roundtable aims at bringing together stakeholders in the field of sustainable energy financing. The goal is to create a dynamic discussion at national level, which will then be continued by the key stakeholders and possibly followed up at a second roundtable.

The roundtable devotes time to discussions in breakout sessions and interactions between participants to address the selected topics in depth and to provide recommendations and specific actions that will facilitate energy efficiency investment in Hungary.

In light of the latest EU strategy development, the event will discuss the European Green Deal Investment Plan's three dimensions: financing (mobilise EU funding), enabling (providing incentives to unlock and redirect public and private investment), and practical support (providing support to public authorities and project promoters in planning, designing, and executing sustainable projects). The event will also consider how to align economic recovery after COVID-19 with the green transition. Lessons from the 2008 financial crisis indicate that green projects create more jobs and lead to increased long-term cost savings (compared to traditional fiscal stimulus).

The event will be held in Hungarian, and interpretation will be provided.

Due to the current COVID-19 outbreak, and in order to preserve public health, the event will take place online.

INTRODUCTORY PLENARY

Session chaired by Dénes Bulkai, Senior Energy Advisor, Chairman of ArchEnergy International Renewable Energy Cluster

Keynote speech

Péter Kaderják, State Secretary for Energy and Climate Policy, Ministry of Innovation and Technology

Mr Kaderják presented the Hungarian energy strategy, which aims at providing clean, smart and affordable energy. To achieve this the strategy focuses on four important pillars: putting Hungarian consumers' first; ensuring the safety of the energy supply; utilising the economic deployment opportunities provided by the energy innovations inspired by climate change; creating a climate friendly energy sector.

Two key documents have recently been adopted by the Hungarian Government: the National Energy Strategy 2030 and the National Energy and Climate Plan of Hungary.

By 2050 the entire building stock should be decarbonised and meet the requirements for nearly zero-energy buildings, and priority will be given to vulnerable households. Modernisation will be based on deep renovations.

He made particular reference to the EEO Scheme (art. 7 of the Energy Efficiency Directive (EED)). A draft Hungarian legislative package is to be in place by the beginning of 2021, which will essentially open a completely new market. The Scheme will be submitted to Parliament in the framework of a legislation package that focuses on the full implementation of the EED and the Energy Performance of Buildings Directive (EPBD) on 27 October 2020.

Between 1 January 2021 and 31 December 2030 the goal is to generate new savings that represent 0.8% of annual final energy consumption. The Hungarian Energy and Public Utility Regulatory Authority will be responsible for implementing the EEO Scheme.

EU policies on energy efficiency finance, and the energy efficiency dimension of the EU recovery package

Carlos Sanchez Rivero, Team Leader, Energy Efficiency Finance, DG ENERGY, European Commission

Mr Carlos Sanchez Rivero presented the elements of the European Green Deal, which aims at transforming the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy with no net emissions of greenhouse gases (GHGs) by 2050.

In this context, the European Commission has set a new 2030 Climate Target Plan, cutting GHG emissions to 55% below 1990 levels by 2030.

The Commission will implement a series of measures to achieve this tougher target, including boosting renewable energy generation, improving energy efficiency and reforming energy taxation and the EU Emissions Trading Scheme (EU ETS). It also intends to revise all existing climate and energy legislation by summer 2021, in line with the new target.

One important initiative is the Renovation Wave, which aims at (at least) doubling the rate of building renovation in the EU. On 14 October 2020, a strategic communication including an action plan and a staff working document (SWD) on EU financing sources will be presented.

He also briefed the participants on the EU recovery package and the next multiannual financial framework (MFF) 2021–2027, which provides a unique opportunity to scale up investments in energy efficiency. Around 30% of the available resources (EUR 550 million out of EUR 1.8 billion) is earmarked for delivering the climate goals of the European Green Deal.

The bulk of the recovery package (Next Generation EU) will be managed by Member States through the Recovery and Resilience Facility (RRF). Mr Sanchez Rivero stressed that Member States have a critical role to play in the RRF. The measures to be financed under the RRF should have a lasting, positive impact on the economy and society, address the challenges identified in the context of the European Semester, facilitate the green and digital transitions, and strengthen the growth potential, job creation and economic and social resilience of the Member State. The National Recovery and Resilience Plans (NRRPs) also have to support the objectives set out in the National Energy and Climate Plans (NECPs).

He mentioned examples of projects and initiatives that are suitable for development in the framework of the RRF, such as blending facilities for private building renovations, project development assistance facilities at a national or regional level, the development of a network of OSSs for building renovations, energy efficiency schemes for public buildings (energy performance contracts), and energy efficiency schemes for residential buildings.

He further mentioned possible initiatives supporting the decarbonisation of industry, SMEs, and heating and cooling systems.

The presentation is available [here](#).

Hungarian framework for sustainable finance – focus on energy efficiency

Gábor Gyura, Head of the Sustainable Finance Department, MNB

Mr Gábor Gyura briefly presented the European policy milestones, such as the European Green Deal and the EU Sustainable Finance Action Plan adopted by the European Commission in March 2018, and concluded that the energy efficiency of buildings is a key area in the climate strategy in most EU countries, but fiscal constraints only allow the necessary green investments to be financed from the budget to an insufficient extent. The key to the solution is to better mobilise funding from banks and investment funds, i.e. green or sustainable finance.

In the context of the EU Sustainable Finance Action Plan, the MNB launched its Green Program in January 2019. The Program's aim is twofold: to mitigate the risks associated with climate change and other environmental conflicts and to expand green financial services in Hungary. The Program is based on three pillars: green initiatives for the financial sector; the development of the MNB's social and international relations; and, finally, the further greening of its own operations.

MNB launched a preferential capital requirement programme for credit institutions in December 2019 to support the growth of green financial products and to improve the energy efficiency of the Hungarian building stock. The programme simultaneously promotes green risk awareness in the banking sector and market development, and supports lower credit risk ratings for energy efficiency investments.

The MNB has joined the Advisory Council of the Energy Efficient Mortgages Pilot Scheme. The goal of this initiative is to promote energy efficient mortgages with favourable lending conditions to finance energy efficient property purchases and renovations. The Scheme contributes to the development of risk management related to mortgages, and to the decrease in the energy consumption of Hungarian households.

As far as the future plans of the Hungarian Development Bank (MFB) are concerned, Mr Gyura underlined the need to further adopt the EU regulatory framework and initiatives such as the EU Sustainable Finance package, the 'green supporting factor', and the integration of ESG into the management practices of banks. The basis for the development of the local regulatory framework is the complementarity between the environmental/energy/climate regulations and the regulation of sustainable finances. High priority areas include the initiation of energy efficiency lending in the retail banking sector, the creation of the Structural Reform Support Programme, the Green Preferential Capital Requirement Programme for the enterprise sector based on green taxonomy, and capital market developments for local governments using green bonds.

The presentation is available [here](#).

European Investment Bank climate finance activity

Manuel Dueñas, Head of Section, European Investment Bank (EIB)

Mr Dueñas introduced the objectives of the EIB, and the allocation of funds for 2019. He further briefed the participants on the EIB Climate Strategy, which aims at unlocking energy efficiency, decarbonising the energy supply, supporting innovative technologies and new types of energy infrastructure, and securing the enabling infrastructure.

The EIB is branded as the EU's climate bank and intends to play a leading role in mobilising the finance needed to mitigate climate change. The EIB Group will aim at supporting EUR 1 trillion of investments in climate action and environmental sustainability in the critical decade from 2021 to 2030; and will gradually increase the share of its financing dedicated to climate action and environmental sustainability to reach 50% of its operations by 2025. The EIB Group will align all its financing activities with the principles and goals of the Paris Agreement by the end of 2020. Under

its new energy lending policy, the EIB will exclude from its financing projects energy production and transformation related to fossil fuels.

The EIB's activity in energy efficiency financing can be divided into financing, blending, and advising.

Financing activities include: direct financing for promoters of energy efficiency investments; indirect financing for energy efficiency investments through financial intermediaries; and financing by investing in energy efficiency equity funds.

Blending activities include: combining debt and grant financing; and combining financing and advisory services. The EIB has provided large financing facilities to public sector borrowers for the co-financing, with European Structural and Investment Funds (ESIF), of energy efficiency investments (e.g. ESIF – EUR 1.5 billion / energy efficiency investments – EUR 90 million). Specific products developed to provide funding include risk-sharing guarantees and advisory services for financial intermediaries (e.g. Private Finance for Energy Efficiency (PF4EE) and Smart Finance for Smart Buildings (SFSB)).

Advising activities include providing technical assistance or advisory support to energy efficiency promoters and financiers (ELENA, JASPERS, European Investment Advisory Hub). Within the ELENA programme, technical support has been funded by the EIB for preparations for energy efficiency and RE projects at local level. More than 100 investment programmes have been supported with EUR 180 million over 11 years.

The presentation is available [here](#).

Financing energy through the Cohesion Policy in Hungary

Raluca Ionescu-Isaksen, Programme Manager, DG REGIO, European Commission

Ms Ionescu-Isaksen emphasised the significant need for reducing energy consumption in Hungary, particularly in buildings. A total of 90% of the building stock requires renovation and more than 25% of the population live in houses with poor conditions. The Hungarian NECP estimates that EUR 60 billion is needed for the period 2016–2040.

Between 2014 and 2020, EUR 1.5 billion have been allocated to energy efficiency in Hungary. Several financial instruments are being implemented. These schemes are implemented as separate but coordinated operations between the MFB and the respective managing authorities.

Hungary has accumulated experience in implementing financial instruments like this, and prefers to combine them with grants. For the 2021–2027 period, the regulation will provide a framework for achieving similar combinations in a more structured way. Under a single operation the grant component could reach up to 40% of the financing.

Technical assistance and advisory services are key to ensuring the effective use of resources and to supporting the preparation and deployment of energy efficiency projects. Technical assistance will ensure that stakeholders take advantage of the opportunities provided by the new regulation, and help to implement innovative financial solutions.

The presentation is available [here](#).

Positioning the Hungarian banking sector in the green economic transition process

Réka Hámori, Chief Economist, Hungarian Banking Association

Ms Réka Hámori gave a short assessment of the strategic framework for, and the challenges faced by, the green economic transition from the perspective of the Hungarian banking sector. She emphasised that the policy framework set at European level is supported by the Hungarian banks. The green transition process offers new business opportunities, and the banking sector has a clear business interest in greening the economy. For instance, the European Bank for Reconstruction and Development (EBRD) estimate that the risk value of assets exposed to climate change amounts to EUR 2.5 trillion, which is equal to 2.9% of global GDP. However, the process is burdened by the ESG requirements and the potential additional risks associated with financing certain green projects. Furthermore, global sustainability and digitisation processes require adaptation. In addition, the COVID-19 pandemic adversely affects the priorities of the green strategy.

Ms Hámori underlined the fact that the green transition is a learning process from both a market and a bank perspective, and several forward-thinking initiatives are already in place in Hungary. For example the MNB launched a competition for a Green Finance Award for financial institutions as part of its Green Program to help with greening the financial sector and recognising progress in this area. Banking strategies and products that respond to the emerging new market needs are being developed or are already available. The Hungarian Banking Association is highly committed to supporting this process.

The expectation of the banking sector is a stable, coherent regulatory environment in line with EU green transition policy and climate targets. To formulate a long-term strategy, a profound knowledge of the legal framework is required. To support this, the existing consultation forums with specific stakeholders should be maintained and further developed. The Hungarian Banking Association is considering launching pilot programmes as useful tools to further strengthen the banks' awareness and commitments, as well as to promote best practices. Making unitary framework conditions for public funding available to support the green economy transition is necessary, and the transparency of the programming and delivery mechanisms of this funding also needs to be improved.

Practical steps involve: programming; setting milestones and developing road maps for the recovery from the economic recession caused by the COVID-19 pandemic; consultations on the revision of the Law on Credit Institution and Financial Enterprises; and reinforcing the activities of the Energy Task Force of the Hungarian Banking Association.

The presentation is available [here](#).

SESSION 1: GREEN TRANSITION AT THE FOREFRONT OF ECONOMIC RECOVERY

Session chaired by Dóra Fazekas, Managing Director, Cambridge Econometrics Budapest Office

Rapporteur: Orsolya Fülöp, Officer for Sustainable Cities, Municipality of Budapest

Green recovery – opportunities and challenges

Nóra Szarvas, Green Finance Advisor, MNB

Ms Nóra Szarvas started her presentation with an outlook on the European macroeconomic trends affected by the COVID-19 pandemic. In the first half of 2020, global GDP fell, the growth trajectory was broken, and the unemployment rate started to rise. Whilst the decline in the key economic sectors – such as construction and industry – has been obvious, the renewable energy sector has remained stable.

Renewable capacities have demonstrated a stable and steady growth, independent from the macroeconomic environment, since 2008. The investment costs represented by renewable technologies are constantly decreasing, as is the levelised cost of electricity. The return on invested capital (ROIC) and the weighted average cost of capital (WACC) are substantially more stable compared to conventional energy resources.

The key advantages from renewable energy generation lie in: stable, predictable investment opportunities in a volatile, low-yield environment; job creation in the construction and renewable power sectors; the environmental benefits. The renewable sector faces, however, several challenges caused by the COVID-19 crisis, such as the volatile exchange rate and interest rate environment, and increasing construction and financing costs coupled with lower subsidy ratios and less favourable repayment periods. The financial incentives provided are twofold: keeping the financing costs stable at a low level (preferential green financing products with long-term fixed interest rates or preferential long-term interest-rate swap solutions for green investments) and tackling the financing risks with green loan guarantee products or green bonds.

For the building sector, the drivers include predictable investments that can be financed in terms of energy savings and job creation in the construction sector, as well as the social and environmental benefits. However, in addition to the increasing investment and capital costs, the building energy retrofit process is burdened by issues of liquidity and creditworthiness. Anticipated solutions include energy efficiency products with preferential interest rates, green credit guarantee products, ESCO and on-bill finance schemes, and green bonds.

The presentation is available [here](#).

Development of the climate strategy of the City of Budapest

Ada Ámon, Chief Advisor to the Mayor of Budapest, Municipality of Budapest

Ms Ada Ámon started her presentation with key factual data concerning the climate status of the City of Budapest. According to a very recent public opinion poll, the most critical environmental conflicts in Budapest include: air pollution (32% of the responders); the increasing traffic and use of vehicles (22%); waste generation (16%); and city maintenance (7%). The building sector represents 43% of the total final energy use, of which residential buildings account for 39%. Approximately 77% of homeowners are interested in the energy refurbishment of their home, however 50% consider the contribution of public funding to be indispensable.

Regarding the residential sector, the City of Budapest is aiming at the energy retrofit of one third of the residential building stock (approximately 300 000 homes in total) by 2030. This represents a cumulative investment of HUF 800–1 000 billion (EUR 2.3–2.9 billion) and a 25% drop in the current CO₂ emissions from the residential sector. However, without public participation (EU funds, government and local grant support) the pace of the energy renovation of residential buildings remains slow.

Building energy investments are complex, require a large array of skills and involve a lot of inconvenience. In addition, the current domestic energy prices are distorted, which means there is a low rate of return on energy investments. Furthermore, at least three quarters of the population doesn't have sufficient savings to undertake such investments. On the other hand, the macroeconomic impacts of energy renovations are significant. About 40 000 jobs have been created in the construction and energy efficiency technology industries. Moreover, the central budget generates additional revenue of HUF 70 billion from tax payments, contributions, etc. (offset against the loss in VAT revenues due to the reduced energy consumption). The financial savings by the homeowners on their energy bills represent HUF 50 billion.

Ms Ámon also gave a brief overview of other key green measures planned by the Municipality of Budapest. Budapest plans the energy retrofit of its own public buildings, which is regarded as especially important in terms of demonstrating the commitment of Budapest to the implementation of climate measures. In addition, the greening and development of the district heating system, the reconstruction and energy modernisation of the public lighting network, and urban mobility are key priorities. The Budapest Mobility Plan was adopted in 2019. It addresses 55 measures related to: the fix-track transportation and bicycle networks; improved links between the suburban rail network and the urban transport system; the development of P+R and B+R infrastructure and low emission zones; the energy efficient upgrading of the public transport fleet.

The presentation is available [here](#).

Supporting the EU Green Recovery – the Croatian perspective

Julije Domac, Managing Director, North-West Croatia Regional Energy Agency (REGEA)

Mr Domac presented the potential for green recovery in the Croatian context. New business opportunities have been identified in Croatia during the COVID-19 pandemic, including investments fostering the green and digital transitions, IT services, remote work, and digitalisation. The most promising sectors in this context are energy, agriculture and health.

Along with the COVID-19 pandemic there was an earthquake in Zagreb, which added to the overall impact of the crisis but also provided new opportunities. The Zagreb City Advisory for Earthquake Recovery is testing recovery models in relation to strategic long-term visions with potential national (and wider) deployment for a green transition. It includes opportunities for the development of district heating systems, heat pumps, smart buildings, smart grids, the utilisation of locally available resources, etc.

Pre-COVID19 financial instruments being considered for energy efficiency include ESIF energy efficiency loans and ESIF public lighting loans.

Overall Croatia has experienced positive examples of sustainable development in adverse conditions (considering the overall economic situation and COVID-19).

Thanks to a swift reaction in relation to the COVID-19 outbreak, economic recovery has been much better than expected. As an example of a positive impact, Mr Domac further highlighted the digitalisation and implementation of IT solutions in public administration.

The presentation is available [here](#).

Discussion

The first discussion point centred around the COVID-19 pandemic. The impacts of the crisis can currently be observed in the drop in GDP and the increasing unemployment rate. It is still too early to judge whether the recession caused by the pandemic will be comparable to the global financial crisis that occurred between 2007 and 2009 in terms of its extent, length, and repercussions. The key question in this context was whether the transition towards the green economy can efficiently trigger economic recovery and further growth.

With reference to the keynote speech of Mr Kaderják (State Secretary) two points were further discussed, namely the government policy concerning the public support of the energy retrofit of residential buildings and the planned legal framework of the EEO Scheme. The participants generally agreed that an energy renovation on the scale suggested for the City of Budapest is far beyond the financial capacity of the public sector. The net-zero energy target for the residential building stock by 2050 is clearly not achievable without the active financial participation of the public sector. It was also agreed that enacting the EEO Scheme would give a new impetus for energy efficiency investments. However, the participation of the homeowners in the scheme needs further discussion. Compared to the enterprise and public sectors, it is a lot more challenging for residential stakeholders

to achieve the critical project sizes attractive to energy companies and to create transparent monitoring structures.

The example of Budapest shows that the energy retrofit of residential buildings has a positive impact on the economy and job creation as well as securing tax revenue for the state budget. Nevertheless, at least 75% of the population do not have any kind of savings at all and is not in the position to access commercial loans at reasonable financial rates. The poor purchasing power of most of the population and their limited access to commercial financing is not only typical for Hungary, but also for other Central European countries including Croatia.

Conclusions and recommendations

The main conclusions and recommendations from the session are summarised below.

- The green economic transition, along with the digital transition, is regarded as a key driving force for economic recovery and sustainable growth.
- A dynamic market uptake in the residential sector that targets deep energy renovation cannot be triggered without public grants and credit guarantee instruments. Given the enormous potential of the residential building stock in terms of achieving the national energy saving and climate targets, more attention should be paid at policy level to the residential sector, and it should be supported by appropriate financial instruments.
- The EEO Scheme is regarded as a good opportunity to support energy efficiency improvements in the residential sector. The potential added value from residential energy retrofits should be considered from a legal perspective.

SESSION 2: MAKING ENERGY EFFICIENCY INVESTMENTS ATTRACTIVE TO THE FINANCIAL SECTOR

Session chaired by Borbála Czakó, President, Hungarian Business Leaders Forum, Former Ambassador of the Republic of Hungary to the United Kingdom

Rapporteur: Ildikó Ray-Adamecz, Corporate Finance Expert, PEK

The Energy Efficient Mortgages Initiative

Luca Bertalot, Secretary General, European Mortgage Federation and Covered Bond Council

Mr Bertalot initially presented the key drivers for banks engaging in energy efficient mortgages. He mentioned the improved risk profiles related to reductions in the impact of energy costs compared to incomes, enhanced property values and positive market responses (in relation to both consumers and investors).

The Energy Efficiency Mortgages Action Plan (EeMAP) was launched in 2018 and involved lending institutions, support organisations and an Advisory Council. The MNB joined the Energy Efficient Mortgages Initiative (EEMI) Advisory Council in July 2019. The Council is committed to facilitating dialogue between policymakers and stakeholders from the financing and banking communities, as well as the property and construction sectors at local, European, and global levels.

EeMAP is a market-led initiative focusing on the design and delivery of an 'energy efficient mortgage', which is intended to channel private capital into energy efficiency investments.

The target is to design an optimal, cost-effective value chain and ultimately to analyse the feasibility of an energy efficient mortgage (building owners would be incentivised to improve the energy efficiency of their buildings or acquire an already energy efficient property by way of favourable financing conditions linked to the mortgage). The ability of lending institutions to offer incentives linked to mortgages (e.g. reduced interest rates and/or increased loan amounts) reflects the reduced credit risk of these loans.

In December 2018, the EeMAP initiative announced a common definition of an energy efficient mortgage and has provided various policy and market recommendations in relation to various development stages.

The presentation is available [here](#).

International experience on utilities providing on-bill finance for energy efficiency

Paolo Michele Sonvilla, Senior Manager, RenOnBill

The RenOnBill project aims at promoting the development and implementation of on-bill schemes in Europe (based on experience from North America) in relation to scaling up the deep energy renovations of residential buildings. It is often used to reduce upfront costs by repayments through monthly utility bills.

RenOnBill has been implemented in four focus countries (Spain, Italy, Germany, and Lithuania) and leveraged using national stakeholder platforms. Three partner utilities are supported by the project team developing pilot on-bill schemes. The scheme can be implemented using on-bill financing (OBF) where the upfront capital is provided by the utility (or a public source for specific programmes), or on-bill repayment (OBR) where the upfront capital is provided by a private third party (usually banks or other financial institutions).

RenOnBill's assumption is that an implementation of on-bill schemes would require close cooperation between energy utilities and financial institutions. There is initial interest from financial institutions, however they need various clarifications on risk assessment, relations with the utilities and the possible blending with public funds or guarantees.

A market potential analysis has been made in the four pilot countries, focusing on important aspects such as market readiness, the legal framework, operational issues, and the local context around the involved utilities.

The presentation is available [here](#).

COVID-19 turbocharges energy saving measures into capital market products

Csaba De Csiky, Senior Managing Partner, EnerSave Capital

Mr De Csiky underlined the fact that institutional investors have a major role to play in the green transition. However, outside the major pension funds, insurance companies and specialist funds, institutional investor allocations to energy efficiency projects remain limited, particularly when it comes to direct investment.

Among other things investor hesitations are due to a lack of expertise when it comes to the technical know-how (regarding the technology used by ESCOs in the energy efficiency projects). These problems are compounded by a lack of suitable investment vehicles providing the risk/return profile that institutional investors need to manage the specific risks associated with clean energy projects.

Finance is the key to the full scale rollout of sustainable energy assets. For scaling, the standardisation of the contractual arrangements of receivables is key. Standardised contracts are the basis for the aggregation of sustainable energy assets as tradable securities via securitisation. This was successfully tackled in the H2020 LAUNCH project (under the leadership of EnerSave Capital). This in turn accelerated deal closures and market growth within the energy efficiency arena. The LAUNCH project enabled, via standardisation, the bundling of similar projects and enabled institutional investors to fund smaller projects (see presentation).

In relation to market expectations, Mr De Csiky stressed that institutions control a sizeable amount of the population's cash and could develop ESG-based (sustainable) investment products targeting the retail investor. Banks can encourage, with the EIB's help, lending to SMEs engaged in the energy efficiency industry using standardised client contracts that would help in securitising these receivables.

Investment funds in general should increase allocations to the green sector. Assets backed by green energy generation are comparatively low risk. Assets backed by energy efficiency – subject to the measures being well executed and using proper equipment – are low risk, and are non-correlated because repayment comes from freed up cash.

The presentation is available [here](#).

Discussion

The first two presentations, both funded by the H2020 programme, addressed specific de-risking schemes, and the third presentation focused on what the investors required in order to finance green investments.

The discussion was largely focused on the two de-risking schemes. It was noted that the EeMAP initiative involves a market-led common data portal (EeDaPP) that supports the investors so that they can better understand the risk profile of energy efficiency investments.

The RenOnBill concept is very much in line with the EEO Scheme stipulated by the EED, which is being legally implemented in Hungary, and is expected to be enacted soon. The participants of the session agreed that the adoption of the model in Hungary is worth assessing, but several legislative changes are required to appropriately tackle the legal/finance/tax framework.

Further discussion was concentrated on the barriers currently faced by the commercial banks. VAT is 27% in Hungary, therefore a lot of retrofits in the residential sector are implemented in the grey zone of the economy (without invoices). With the current VAT rate, invoiced renovation work is less affordable. For newly built homes 5% VAT is applicable until the end of 2023.

Conclusions and recommendations

The main conclusions and recommendations from the session are summarised below.

Energy efficient mortgages

- The EeDaPP data portal should be promoted to other OSS initiatives to establish links with projects that efficiently collect data relating to energy efficient mortgage assets on a large scale via a standardised reporting method.
- Providing information to consumers and banks on the availability and reliability of the installers completing the renovations is a key issue to be addressed (quality of work, quality of products/equipment to be built in, qualifications of the installers).
- The standardisation of contracts is imperative from the point of view of banks and ESCOs, but also for consumers.
- The creation of a national hub on energy efficiency financing in Hungary is regarded as a particularly good incentive. A roundtable to address its rationale and viability in detail is recommended.

On-bill financing

The applicability of the model and the related market needs should be assessed in Hungary. Key issues to be tackled include:

- regulatory framework for lending/leasing by utilities or SPVs in Hungary;
- invoices of lending/leasing for service component including VAT issues; and
- legal guarantees for transferring the repayment obligations to the new owners (object-based finance).

The model must be incorporated into the legal/tax framework; potential changes to regulations should be discussed and recommended.

Commercial banks' perspective

To overcome barriers from the perspective of the commercial banks, the following solutions need to be implemented:

- the appropriate criteria for ESG qualifications should be elaborated, standardised and incorporated into the qualification and risk management procedures of banks;
- the criteria on green client qualifications need to be elaborated, standardised and incorporated into the standard procedures;
- data need to be collected on the performance of EPCs, ESCOs, and energy efficiency measures – and should be made accessible (in the context of GDPR requirements);
- the risk evaluation process should be standardised, including the incorporation of the green aspects into the standard risk assessment and product development procedures (which might trigger amendments to the laws and regulations concerning financial institutions); and
- extensive capacity building regarding ESG and green qualification criteria.

Consumers' perspective

From the consumers' perspective, energy efficient residential building and used buildings subject to energy retrofits should be given an equal footing. The discounted VAT mechanism would give a large impetus to energy renovations, and it would also contribute to a reduction in the size of the grey areas in the economy.

SESSION 3: INTEGRATED HOME RENOVATION SERVICES

Session chaired by Zsuzsanna Koritár, Managing Director, Hungarian Energy Efficiency Institute

Rapporteur: Karolina Czakó, Project Coordinator, Blue Planet Climate Protection Foundation

European experiences on one-stop-shops for building renovation

Benigna Boza-Kiss, Central European University, Hungary / International Institute for Applied Systems Analysis (IIASA), Austria

Ms Benigna Boza-Kiss presented a study she prepared with the Joint Research Centre on OSSs supporting residential retrofits. She highlighted the fact that the European building market is typically top-down and supply driven, with discrepancies among the products on offer, the end-users' needs and affordability. Consumer demand regarding retrofit measures is highly fragmented – there are many customers with a wide range of preferences – and on the supply side there are many, predominately small, contractors (whose performance quality is mostly unknown), and countless technical and managerial solutions.

OSSs offer holistic, integral solutions for residential energy retrofits – this facilitates the process for consumers and, at the same time, represents an innovative business model for suppliers. In parallel, OSSs can enable high quality net-zero solutions at a reasonable cost. In summary, OSSs are in a position to bridge the gap between the users and the construction supply side, and therefore increase the actual renovation rate by supporting potential clients through the entire customer journey.

The study identified 63 OSSs in the EU and Norway, located in 22 Member States; of these 57 were found to be operational in 2020. Around two thirds of the EU Member States have at least one active OSS within their respective renovation markets. The current European OSS market accounts for slightly more than 100 000 energy renovation projects per year. OSSs have increased in number and activity over the last 5-10 years. A total of 70% of the OSSs were launched after 2012, and only about 10% of the OSSs identified have ceased trading since then.

It is estimated that if the OSS renovation volume could be increased tenfold, then the global OSS activities would cover about 10–15% of the desired renovations until 2050 – at low social cost, integrating private investments, and with client friendly methods.

OSSs may be categorised by type (e.g. policy, industry, ESCO, consultant driven, cooperatives incorporating social benefits, or warehouses of pre-designed renovation packages), or by financing mechanisms (such as bank loans, Energy Performance Contracting (EnPC) initiatives, financial instruments and investment funds, or Property Assessed Clean Energy (PACE) programmes).

Finally, Ms Boza-Kiss presented three high impact OSS examples. Espace Info Energie (France) is a public office in Toulouse, EnergieSprong (the Netherlands) was originally a government-funded pilot (2016) aiming at the nZEB standard, and HomeGrade (Belgium) is a municipal department offering free step-by-step financial, technical and administrative services.

The presentation is available [here](#).

SuperHomes programme for homeowners in Ireland

Paul Kenny, Special Advisor to the Minister for the Environment, Climate and Communications, Republic of Ireland

Mr Paul Kenny explained the SuperHomes concept developed by the Tipperary Energy Agency (TEA) in Ireland. SuperHomes is a OSS promoting a highly efficient home retrofitting process and combining a range of the most appropriate and cost-effective energy standards.

SuperHomes is run by the TEA and supported by the Sustainable Energy Authority of Ireland. It plans to establish four regional OSSs and engage 80 high performance contractors to deliver quality retrofits. It organises capacity building and training for homeowners / surveyors / contractors / technical staff, provides for attractive finance solutions that are independent of public finances, and creates open-source energy performance data platforms that demonstrate the value of undertaking nZEB retrofits to the market.

SuperHomes offers homeowners the opportunity to retrofit their pre-2006 houses to an 'A' energy rating standard. Based on a whole-house solution, it includes the following mandatory measures: heat pumps, airtightness improvements, advanced ventilation systems, and insulation to a high standard. Depending on the project and grant targets, solar PVs may also be included. The financial support takes the form of a grant covering 35% of the upgrade costs, with the option of spreading the remaining costs over 5 years via a loan.

A SuperHome is a highly efficient home that combines a range of the most appropriate and cost-effective energy measures. SuperHomes design a whole-house solution. SuperHomes designs the home's energy solution and looks after all the key stages, from tender through to the payment of grant funding. It engages leading contractors and experienced retrofit specialists to offer the best quality retrofits. The process starts at the application and is followed by a survey and an energy report outlining the energy recommendations, costs and grant funding. If the recommendations in the report are acceptable, an implementation contract for the retrofit is concluded.

Opportunities to expand the SuperHomes model outside Ireland can also be explored using links created by the European Heat Pump Association and FEDARENE.

The presentation was done without slides

Upscaling the energy retrofits of Hungarian homes through the development of an integrated business model – status and challenges

Gábor Orbán, Managing Director, Energiaklub Climate Policy Institute

Mr Orbán presented the RenoHUB project, which is funded by the EU H2020 research and innovation programme. RenoHUB aims at triggering a significant upscaling of the energy retrofits of Hungarian homes through the development of an integrated business model that is sustainable and financially self-sustaining after the end of the project. The key features of the strategic environment include: reducing large amounts of energy consumption in outdated residential building stock; significant energy savings and the potential for CO₂ reduction; political commitments to climate change mitigation at national and European levels; and a tangible interest and willingness to improve the energy performance of homes. Nevertheless, the energy retrofit rate of residential buildings is low, it remains below 1% per year.

RenoHUB's focus is to overcome all the non-financial barriers that cause setbacks in the process. These setbacks were summarised by presenting the challenges the homeowners are facing. These include: activities required beyond one's comfort zone; lack of technical and management skills; loss of control over the process; unpredictability, especially on quality and price; difficulties with financial appraisal and attracting funding; and a lack of trust and information.

RenoHUB adopts the OSS model, i.e. an integrated business model that is able to support the homeowners along the entire customer journey (from social, behavioural, communication and capacity-building aspects, through supporting the decision-making and technical implementation, to ex-post assessments of energy and cost savings). In the planning phase, RenoHUB realised that the

most appropriate institutional solution for reaching out to the widest possible target group, was a combination of an online platform and a network of physical offices. The ongoing tasks focus on: the design of the optimally tailored customer journey that ensures satisfied clients; the fine-tuning of the scope of services (on-line calculator, expert database, standardised templates, etc.); and the finalisation of the business model with a particular emphasis on financial sustainability and replicability beyond the project lifetime.

The presentation is available [here](#).

Discussion

The discussion started with the role of grant financing in residential energy retrofits. The participants agreed that without non-reimbursable public funding it will be difficult to achieve a significant increase in the retrofit rate. In the Irish SuperHomes experience, public support is positioned at 30–35% of the total investment. The participants called for a long-term perspective and increased transparency in the programming, as well as in the delivery and monitoring mechanisms, of public resources.

A long-term and predictable strategic approach is also expected from the lending institutions. Also, a better understanding of the risk profile of the energy efficiency projects is expected from commercial banks.

Another discussion point was whether current consultancy and installer capacities are sufficient (in terms of appropriately responding to increased market needs). Currently there is a shortage of professionals that are able to face the potential challenge presented by the market uptake of residential retrofits. Contractors are more interested in new constructions than renovating existing buildings. The need for parallel capacity building was underlined.

The better integration of the retrofit value chain was also discussed. The factors and business interests that motivate contractors and financiers (key players of the renovation process) should be acknowledged. Very often only the interests of the demand-side stakeholders are articulated, and less attention is given to the considerations of the supply-side stakeholders. Technology providers are seen in a positive light, but there is a general mistrust towards contractors and financiers.

Representatives of local governments requested more details concerning the RenoHUB project and wished to explore the cooperation opportunities.

The experience of SuperHomes reiterated the need for an integrated approach and the continual education of all parties involved.

Conclusions and recommendations

The main conclusions and recommendations from the session are summarised below.

- Grant support in line with European standards needs to play a prominent role in the energy retrofit of buildings in the long term, provided that a comprehensive residential building

energy renovation is planned for and realised (which is the declared goal). The Irish example shows that public support for this is positioned at 30–35%.

- Long-term financial predictability is needed for public funding programming and delivery systems, and to attract financing from commercial banks.
- It is necessary to consider the interests of all actors along the renovation value chain (which, one often forgets, also includes the contractors and the financiers – their specific driving forces and business interest should be acknowledged).
- There are currently not enough specialist staff available to meet renovation needs. Training and education for all the stakeholders of the building retrofit value chain is required at a large scale.
- The specific interest expressed by the representatives of local governments in cooperating with RenoHUB is particularly welcome.

CLOSING PLENARY

The Closing Plenary was moderated by Mr András Huszár, Managing Director of Green Policy Center. Following a brief introduction, Mr Huszár invited the Rapporteurs, Ms Orsolya Fülöp, Ms Ildikó Raj-Adamecz and Ms Karolina Czakó to summarise the key findings and the takeaways from their respective sessions.

After the Rapporteurs' summary, Mr Huszár invited Mr Gábor Gyura of the MNB and Carlos Sanchez Rivero of the European Commission to close the roundtable on behalf of the organiser institutions.

Mr Huszár concluded that the roundtable was considered to be a promising start. He welcomed the interest of both the European Commission and the MNB in arranging a follow-up event to further develop a stakeholder forum around energy efficiency in Hungary.

ANNEX: LIST OF PARTICIPANTS

A++ Energy Consulting
AACM Central Europe
ArchEnergy International Renewable Energy Cluster
Association of Hungarian Family Home Owners
Austral Consulting & Investments
Baker McKenzie Budapest
Blue Planet Climate Protection Foundation
British Embassy Budapest
Budapest District Government
Cambridge Econometrics
Central Bank of Hungary (MNB)
Central European University (CEU)
Central Europe Trust
CIB Bank Hungary
Climate Strategy 2050 Institute
Creara
Deloitte
Dentons Réczicza Law Firm
ÉMI Construction Quality Control
Energiaklub Climate Policy Institute
EnerSave Capital
Ernst & Young Advisory
Erste Bank Hungary
European Commission, DG ENERGY
European Commission, DG REGIO
European Commission, EASME
European Investment Bank (JASPERS)
European Mortgage Federation and Covered Bond Council (EMF-ECBC)
Fundamenta Housing Bank
Fundamenta Value Chain
Greenbors Consulting
Green Policy Center

Hungarian Association of Environmental Enterprises
Hungarian Banking Association
Hungarian Business Leaders Forum
Hungarian Development Bank (MFB)
Hungarian Energy Efficiency Institute (MEHI)
Hungarian Gas Storage
IMRO-DDKK Nonprofit
International Institute for Applied Systems Analysis (IIASA)
Ministry of Innovation and Technology
MKB Consulting
MN6 Energy Agency
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Municipality of Mórahalom
MVM Group
North-West Croatia Regional Energy Agency (REGEA)
PANNON Green Power
PEK
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