

Preparatory Report Capacity Building Program

Focus Country Hungary

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Preface

The underlying report forms the basis for the organisation of a national workshop in Hungary which aims on building capacities and share best practices in respect to financing energy efficiency retrofitting of public buildings. It is meant to provide guidance for all interested parties that are affected by the topic. The report also serves as the first step in regards to the long-term strategy for Hungary that is to be formulated by the CITYnvest project.

The national workshop will address all parties involved in the value chain in respect to the energy efficiency market in Hungary. Main audience will be Local Authorities, ESCO´s as well as financial institutions. The goal is to discuss about innovative financing instruments that could enable Hungary to achieve its 2020 targets in respect to energy efficiency.

Additionally further debates amongst stakeholders after the CITYnvest national workshop will be encouraged. Therefore this report provides an opportunity to remain active and in contact with peers and experts. For further information how to get involved please visit www.CITYnvest.eu or contact info@citynvest.eu.



Summary of strategy in Hungary

Legislative framework

Common for all European member states are the long-term climate and energy frameworks. Concerning the building sector, at least 88%-91% of CO₂ emissions should be reduced in residential and service (collectively buildings) sectors to achieve the 2050 Roadmap moving to a low-carbon competitive economy. Furthermore, the building sector positions itself in the top 3 of with the biggest potential sectors (environmental impact of 70-80%) to contribute to reaching the Roadmap for a Resource Efficient Europe. Europe is developing slowly but steadily a policy framework to encourage Members States legislative processes: notably the EPBD and EED. The EPBD (European Energy Performance of Buildings Directive) includes among others the energy performance certificates and nearly zero energy standards for new buildings. The EED (Energy Efficiency directive) requires member states to renovate at least 3% of their public building stock each year and develop National Energy Efficiency Action Plans (NEEAPs, art.4).

National context

- Hungary is a parliamentary republic; head of state is the president. The capital city Budapest and nineteen other counties form the regional administrative level, additionally 3.152 cities and municipalities exist.
- Dependency on energy imports in order to meet national demand
- Building stock is responsible for 40% of total energy consumption. Especially houses that have been built in the era from 1946 to 1980 show high inefficiency in energy usage. Majority of energy consumption is used for heating and cooling.
- -Demand for retrofitting exist in general and therefore renovation strategy has no target on any specific region in the country
- Introduction of price cap for energy supplied to the private sector is counterproductive to the goal of energy savings and decreases incentives to act upon such goals

Hungary´s second NEEAP¹ was published in October 2011. In this plan the country presented the goal of reforming its renewable energy system and significantly increasing energy efficiency with an outlook on a commitment of 10% energy saving until 2020. Energy savings are to be achieved by more efficient use of available resources. The plan is in line with the requirements set out in Energy Service Directive 2006/32/EC. It is based on various national Plans and Strategies that tackle the topic of Energy Savings. The NEEAP is combining the targets as set in the New Széchenyi Plan, National Energy Strategy, Hungary´s Renewable Energy Utilisation Action Plan, EU 2020 objectives in Hungary´s National Reform Programme as well as the Energy Efficiency Plan 2011 of the European Union.

Around 40% of total energy consumption of the country is attributable to the building stock while 2/3 of this consumption is due to heating and cooling. Buildings from the era 1946 to 1980 show

¹ Second National Energy Efficiency Action Plan of Hungary until 2016 with an outlook on 2020; Ministry of National Development; October 2011; https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-efficiency-directive/national-energy-efficiency-action-plans



significant lack of energy efficiency. As a majority of the building stock falls into that construction period, tackling those will have a significant effect of the energy savings balance of the country. Deep retrofitting is necessary here in order to achieve large savings.

By 2016 Hungary was planning on having reached total energy savings of 57,4 PJ per year with biggest contribution coming from Population, Public Institutions and Industry. In order to implement the required measures, investments of 1.395,8 billion HUF were anticipated. These targets were considered reachable in case the measures foreseen in New Széchenyi Plan will be implemented according to plan.

The report's review by the European Commission indicates that the issues and measures addressed in this plan are not a sufficient base for the updated third NEEAP to be handed in by 30 June 2014. The following critical points are mentioned: Forecasts on primary energy demand by 2020 are not reliably stated as they are based on insufficient statistical data; Monitoring of effects caused by implemented measures is not being done and sufficient statistical date on energy savings is not available for all sectors; Information on possible improvement in regards to energy efficiency in industrial and service sector is not considered as reliable; Information about energy use of residential buildings is insufficient; Statistics on energy consumption of public buildings are not reliable; National Strategy on Energy Performance of Buildings is not finished and not in line with all requirements as set out in Directives 2009/28/EC and 2010/31/EU; Information on development of energy demand of transportation sector is not reliable.

Hungary is one of the countries in the European Union that received warnings for not adequately implementing the Energy Efficiency Directive (2012/27/EU) into national law. In March 2015 the country was eventually referred to court² since the due date for transposing the European directive into the national context was originally set for all member states to 5. June 2014.

Hungary´s third NEEAP³ was handed in to the European Commission in August 2015. Efficient use and saving of energy is seen as the most suitable measure to overcome the country´s dependency on importing energy in order to meet national demand. Growth rates of the Gross Domestic Product (GDP) have been lower than planned in recent years and this has a significant influence on the forecast of energy consumption until 2020. With accounting for 40% of total consumption, the building stock is still considered a significant point to be targeted. Nevertheless considering current trends and implementation of planned measures, Hungary is aiming on a national 2020 target of 1.009 PJ for primary energy consumption resulting in a gross final energy consumption of 603 PJ in 2020. The Hungarian Energy and Public Utility Regulatory Authority (MEKH) is in charge of collecting and analysing statistics in regard to energy savings in the country in order to monitor development of respective indicators.

In order to achieve these targets, Hungary decided to take alternative policy measures which is one of the options available according to Article 7 of the Energy Efficiency Directive. In this regard the government has decided to introduce a financial package to be offered but has not yet concretely formulated how it will be structured. This financial package will most likely include subsidised loans for the commercial and private sector (including green loans) as well as the offer of providing mentoring for energy audits. ESCO financing activities are also planned to be encouraged via low-

³ Hungary's National Energy Efficiency Action Plan until 2020; Ministry of National Development; August 2015; https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-efficiency-directive/national-energy-efficiency-action-plans



http://europa.eu/rapid/press-release_IP-15-4668_en.htm

interest rate loans. MEKH will monitor the implementation and results of those measures. By 5th December 2015 all businesses larger than SME have to have an energy audit performed which afterwards needs to be repeated every four years. Results of these mandatory audits will be recorded in a database set up and hosted by MEKH which is planned to be operational in the beginning of 2016. Voluntary energy audits will be recorded here as well. Progress reports related to energy audits in Hungary will be provided to the Commission in regular intervals in order to demonstrate achievement of energy savings. Introduction of smart metering has been started. The aim is to have Information about individual consumption accessible for all Hungarian households free of charge.

The Hungarian government is planning to set up a National Network of Energy Engineers which will provide a pool of knowledge in order to enhance awareness raising training of all users including private citizens, companies and governmental bodies. The experts of that network could assist local authorities in drawing up their SEAPs.

According to the National Building Energy Performance Strategy⁴ (NABEPS), more than half of all energy used up by the building stock is coming from natural gas which implies that a reduction of energy needed by this sector is significantly influencing the import needs of the country as current natural gas demand cannot be satisfied by national resources. Regardless of the energy source used the energy demand of the building stock is mostly related to heating which leads to high seasonal effects causing storage demand and other related management costs.

As mentioned in the third NEEAP of Hungary, national regulations contain the following (selection):

National Building Energy Performance	Government Decree 1073/2015 adopted on 25 th
Strategy (NABEPS)	of February 2015
National Energy Strategy 2030	Parliament Decision 77/2011 of 14 th October
	2011, amended with Parliament Decision 5/2015
	of 20 th March 2015
New Széchenyi Plan	Government Decree 1163/2010
Renewable Energy Utilisation Action Plan	Government Decree 1002/2011
Energy Audits	Act LVII of 2015 on energy efficiency;
	Government Decree 122/2015 of 26 th of May
	2015; Decree 26/2015 of 26 th of May 2015 of the
	Minister of National Development

Financial framework

According to analysis conducted for the NEEAP respectively other national strategies that form the basis of the plan, the greatest barrier to investments in energy efficiency measures and therewith resulting improvement of the existing building stock is the shortage of available funding for the parties concerned.

⁴ National Building Energy Performance Strategy; Commissioned by the Ministry of National Development, drawn up by Émi Non-Profit Limited Liability Company for Quality Control and Innovation in Buildings; Budapest, February 2015; https://ec.europa.eu/energy/en/topics/energy-efficiency-directive/buildings-under-eed



In Hungary several energy efficiency grant programmes are put in place. The funding for those programmes mainly comes from the Environment and Energy Operational Programme (EEOP), the Green Economy Financing Scheme and the central government budget. The "Warmth of Home Programme" is a sub-programme financed by the Green Economy Financing Scheme.

Financial support schemes available in the Hungarian context:

EEOP	Environment and Energy Operational
	Programme. Funding type: Grant
EPIOP	Environment Protection and Infrastructure
	Operational Programme. Funding type: Grant
Green Economy Financing Scheme	Prior to 1st of January 2014 it was called Green
	Investment System (GIS). Funding raised from
	state sales of Kyoto units.
	Includes the "Warmth of Home Programme".
	Funding type: Subsidy
PHARE EEFS	Preferential Loans for Energy Efficiency
	Investments. Funding type: Preferential loan
ESCF	Energy Saving Credit Fund. Funding type:
	Preferential loan.

Financial support schemes on European level relevant for Hungary:

EBRD	European Bank for Reconstruction and
	Development
Horizon2020	Horizon2020 – The EU Framework Programme
	for Research and Innovation
ESIF	European Structural and Investment Fund
EIB	European Investment Bank

Energy Efficiency market

The Energy Efficiency market including Energy Performance Contracting is an important opportunity for energy service providers to benefit from the trend of improving energy efficiency while at the same time the decrease in energy demand causes losses in turnover. It is a good technique for compensation of financial losses and at the same time being an active player in the energy efficiency sector showing environmental awareness is good for the image perceived by the customer⁵.

The energy efficiency market in Hungary is not deeply developed⁶. Reasons for this seem to be various issues. On the one hand there are not many governmental incentives for energy efficiency apart from the minimum obligations required by the European Union while on the other hand price caps on energy costs for private households have been introduced which lead to further

⁶ Presentation "Renovation of Residential Buildings in Hungary through ESCO solution" by Enrique Grosser Lagos (Energosys) and Benigna Boza-Kiss (Green Dependent Institute), held in Brussels on 22nd October 2015 at Proficient Workshop on Energy Services Market in the EU



⁵ http://www.trendresearch.de/studie.php?s=633

unimportance to act energy efficient. The shrinking of the ESCO market, in 2015 there were only 6 players active in the Hungarian market compared to 30 in 1990, can also be seen as a problem. Additionally the ESCO market is insufficiently regulated. Legislation in general is uncertain and might change suddenly therefore long-term commitments are not encouraged but legal certainty is a must for financing solutions like Energy Performance Contracting.

Relevant best practices

Within the Covenant of Mayors Initiative, 25 SEAPs from Hungarian Signatories have been handed in of which 15 have been approved by 07.12.2015.

In addition to these signatories, three Energy Agencies, namely ENEREA, LARINEA and LENERG, are registered as official supporters of the CoM Initiative.

Long-term recommendations

Additional input is expected from results of the national workshop that will take place in the first half of 2016.

The key relevant stakeholders need to find their shared values and shared purpose and understand that all of them have the chance to make a unique contribution so that in the end if the public and private sector works together, significant synergies can be realized. Many examples show that energy efficiency implementation leads to job creation and reduced energy bills which then leads to an increase in purchasing power that can stimulate the national economy via increase in demand side actions. Since Hungary significantly depends on imports to satisfy the national energy demand, energy efficiency leads to further energy security which would make the energy supply independent from political unrest or uncertainties from neighbouring countries.

Retrofitting often requires long-term commitments. These commitments are more likely to be made when legal certainty exists. Therefore a stable legal framework regarding energy prices and the stakeholders in the energy efficiency market is necessary to further deepen that market.

National Workshop

Format

As one of the 10 focus countries of the CITYnvest project, the national workshop in Hungary aims to build capacities and share best practices in respect to financing energy efficiency retrofitting of public buildings. It is meant to provide guidance for all interested parties that are affected by the topic. Even though the focus is set on public buildings as a starting point, housing associations or other building owners representing the private building sector are also welcome to join the event and learn about innovative financing instruments that could be the answer for their retrofitting strategies as well.

The national workshop will address all stakeholders of the entire value chain in respect to the energy efficiency market in Hungary. The main audience will be Local Authorities, ESCO´s as well as financial institutions. The goal is to discuss about innovative financing instruments that could enable Hungary to achieve its 2020 targets in respect to energy efficiency.



Additionally, further debates amongst stakeholders after the CITYnvest national workshop will be encouraged. Therefore the workshop should have the character of a networking event where different stakeholders can meet, potential synergies can be explored and long-term collaborations can kick-off.

Goal of the event: Increase awareness of the topic of retrofitting in public buildings. Why retrofitting is so important and how can it be financed. Why is it not happening in Hungary on the scale that is needed to reach sufficient energy efficiency in the country? What are the changes that need to happen? It seems that the main reason for retrofitting not being done to the necessary extend is a lack of up-front investment that is needed to launch the implementation.

After introductory welcoming speech by CITYnvest and its Co-host the Hungarian Energy Efficiency Institute (MEHI), 4 Speakers will be addressing the audience with descriptions of their work / best practice examples (European and Hungarian context). A Panel debate involving Financial Institutions, ESCOs and local politicians will take place that is open for discussion with the audience. The afternoon session will be including workshops / round table discussion to enable detailed knowledge sharing and networking related to various topics concerning energy efficiency retrofiting. Closing speech will include wrap up of the day and further recommendations for project implementation / next steps for target audience. Feedback from participants will be integrated into the long-term strategy recommendations for Hungary.

Schedule

Draft schedule of event as discussed with MEHI

9:30 - 10:00	Registration	
10:00 – 10:20	Introduction (CITYnvest 10 min; MEHI 10	
	min)	
10:20 – 11:30	4 Speakers; 15 min each	
11:30 – 11:45	Coffee Break	
11:45 – 12:30	Panel Debate	
12:30 – 13:30	Lunch break	
13:30 – 15:15	Workshops / afternoon session	
15:15 – 15:30	Closing speech ; wrap up of day	

Expert & stakeholder mobilisation

Central Government

Ministry of National Development
 http://www.kormany.hu/en/ministry-of-national-development
 http://www.kormany.hu/hu/nemzeti-fejlesztesi-miniszterium



Local Government Groups

- Association of Hungarian Cities with County Rank http://www.mjvsz.hu
- Hungarian Association of Municipalities <u>http://www.moszlap.hu</u>
- Hungarian National Association of Local Authorities http://www.toosz.hu
- Hungarian Village Association http://www.faluszovetseg.hu
- National Association of Counties <u>http://www.moosz.hu</u>
- National Association of Local Governments of Communities, Small Municipalities and Micro regions http://www.kosz.hu
- National Association of Small Cities http://www.kisvarosok.hu

Financial service providers/financial institutions

- Private banks and financial institutions that provide funding for Renovation and Development
- European Bank for Reconstruction and Development http://www.ebrd.com/where-we-are/hungary/overview.html
- European Investment Bank http://www.eib.org/projects/regions/european-union/hungary/index.htm

Building owners

 Hungarian Association of Housing Cooperatives and Condominiums http://losz.hu/

Construction Business

 Hungarian Construction Industry Association http://www.evosz.hu/



Energy Sector

• Energy Performance Contractors, Energy Service Companies, Energy Providers

Research & Academia

- Central European University https://www.ceu.edu/
- ENEREA http://www.enerea.hu/
- LARINEA
 http://seap.hu/
- LENERG <u>http://www.lenergia.hu/</u>

NGOs

- Hungary Green Building Council http://www.hugbc.hu/index.php
- Energiaklub http://www.energiaklub.hu/
- Hungarian Energy Efficiency Institute http://mehi.hu/
- Passive House Association of Hungary http://www.paosz.hu/
- IMRO-DDKK http://www.imro.hu/

Invitees, target audiences:

- -Main target group: Local and regional authorities
- -Local ESCOs and other businesses
- -Energy distributors and local energy agencies
- -Financial Institutions
- -National authorities



Local Authorities representatives:

- -Covenant of Mayors signatory with best practice example for retrofitting of public buildings Other potential speakers:
- -Senior Research Specialist with focus on energy efficiency measures in Hungary
- -Senior Expert Consultant on EPC projects
- -Senior Expert from Financial Institution active in the local market

