

# CLOSING REPORT

RenoHUB project – establishment of the first one-stop-shop consulting office network in Hungary, aimed at supporting deep renovations managed by citizens.



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement no. 845652.

# Imprint

This publication summarises the most important results of and lessons learned from the RenoHUB Project financed by the European Union's H2020 funding program.

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# INTRODUCING THE RENOHUB PROJECT

The RenoHUB project launched in November 2019 and closed in May 2023 has been established with the financing of the European Union, was a cooperation of 5 Hungarian professional organisations that united their skills in order to assist in promoting qualitative and quantitative energy renovations by way of applying a one-stop-shop consulting system in Hungary, which already has proven itself abroad.



- a European Union's Horizon 2020 project
- 3,5 years: 2019.–2023.
- 5 Hungarian consortium partner

In the frames of this niche initiative a model comes to life which provides parties interested in energy renovation, with professionally reliable and comprehensive services, meanwhile making the energy renovation processes of residential buildings more human-centric. Services provided by the one-stop-shop consultancy focus equally on family houses and condominium buildings and cover the entire spectrum of energy modernisation from planning throughout installation and guarantee issues up to environment-friendly and economical operation.

This way has the RenoPont Energetics Home Renovation Centre come to life, now consisting of an interactive informative website ([www.renopont.hu](http://www.renopont.hu)) and consultancy offices available at 8 places in the country.

Energy renovation of residential buildings is not only an important means for reducing overhead expenses payable by citizens and for increasing property value, but in most cases homes become therefore healthier, more comfortable and nicer. On country level, building renovations could constitute the most significant development for the achievement of the climate and energy policy targets undertaken by Hungary.

## Members of the RenoHUB Consortium:

Leader of the Consortium



Energiaklub Climate  
Policy Institute Applied  
Communication



Hungarian Energy  
Efficiency Institute



AACM Central Europe  
Consulting Ltd.



IMRO-DDKK Environmental  
Nonprofit Ltd.



Hungarian Family  
House Owners'  
Association

# INTRODUCING RENOPONT

A RenoPont Energy Home Renovation Centre has been established in order that renovators could get at one single place all important technical, financial and legal information related to energy modernisation.

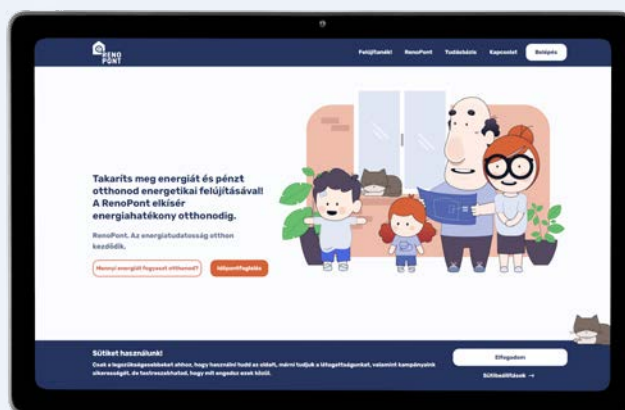
## RenoPont service

Its two pillars are the RenoPont website ([www.renopont.hu](http://www.renopont.hu)) and the consulting offices.



### RenoPont website

On the website interested persons find general information on renovation: the benefits of deep renovation, importance of planning, good examples, a glossary of terms, misbeliefs debunked, and specific help for the planned energy renovation. On the website information can be found on financial possibilities; furthermore an expert database, a product selection guidance and default documents help renovators.



### RenoPont consulting offices

In the consulting offices RenoPont offers personalised assistance: renovators can get advices tailored to their home, life situation and needs; trained consultants help to select the solution most advantageous for them, in order that modernisation entailing the possibly biggest energy saving could be realised from the available resources.



## 10 most important results of the project:

1. **RenoHub model** – the first one-stop-shop consulting system in Hungary
2. **RenoPont website** – multilayer knowledge base and a toolkit for renovators
3. **RenoPont office network and customer journey** – personal consultancy can be requested in 8 offices around the country, where a well-defined procedure helps renovators
4. **Market research** – understanding motivation and obstacles of renovations
5. **Statistical researches** – to what extent does the value of a property increase after renovation?
6. **Innovative financing experiences** – examination of solutions that can be adopted in Hungary, too
7. RenoPont **consultancy training materials and training courses**
8. RenoPont **expert education** and quality assurance through the **Partner Program**
9. **Collection of experiences:** feedbacks and pilot projects
10. **Networking:** connecting Hungarian and international stakeholders

## In numbers:



# A SHORT HISTORY OF THE RENOHUB PROJECT

## Project foundation, background researches: 2019–2020

- project starting date: 15 November 2019
- kick-off: 5–6 December 2019
- processing of foreign OSS examples and model planning: 2019–2020
- background researches: market research, real estate value study, building typology: 2020
- renovation procedure, customer journey foundation: 2020
- research for financing solutions: 2020



## Further development of RenoPont continuously from 2023 on:

- integration of the experiences gained in pilot projects
- inclusion of the experiences gained from questionnaires and feedbacks
- development options for financial products
- further development of the office network, designing and testing new models
- finalisation of the RenoHUB model



## RenoPont development: 2021–2022

- Brand development: name, logo, design – January 2021
- renopont.hu website and knowledge base: November 2021
- first office: RenoPont Nagykanizsa, February 2021
- MEHI offices in Budapest: December 2021
- followed by continuous expansion of the RenoPont office network
- energy savings calculator: summer 2022
- RenoPont consultant training: October 2021
- RenoPont contractor, expert training, Partner Program: June 2022



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# WHY HAS THE RENOHUB PROJECT BEEN IMPLEMENTED?

It is a public domain that in Europe the building portfolio is responsible for 40% of the total ultimate energy consumption, within which the portfolio of residential buildings represents a definitive proportion. Researches conducted in Hungary in the last years revealed that the pace of the energy modernisation of households is not quick enough, meanwhile the citizens' energy consumption amounts to one third of Hungary's ultimate energy consumption. With the help of appropriate energy renovations, a significant part of the energy dedicated to heating could be saved through the renovation of buildings that from the energetics aspect are obsolete. This project focuses expressly on these condominiums and family houses in order to assist in the actual implementation of the renovation plans.

The most important objective of the RenoHub project was the adoption of the one-stop-shop consulting network in Hungary. The "one-stop-shop" (OSS) concept is widely applied in other countries too, because this sort of technical assistance proved to be an efficient means all over Europe – where almost sixty OSSs operate successfully – aimed at facilitating energy modernisation of buildings. The main objective of the project was the adoption of this methodology to the domestic features and demands, i.e. development and implementation of the RenoHub model.

According to the plans, the consulting system made up of a website (online platform) and two (later already eight) consulting offices, strives to furnish renovators with all such technical and financial information that could facilitate the implementation of high-quality energy renovations.

Energy modernisation of residential buildings is important means not only of the reduction of the overhead expenses of households and of increasing of real estate values, but in most cases homes become therefore healthier, more comfortable and nicer. On country level, building renovations could constitute the most significant and indispensable development for the achievement of climate and energy policy targets undertaken by Hungary.





# THE PROJECT ENVIRONMENT: CHALLENGES, OBSTACLES, TRENDS AND POSSIBILITIES FACED BY THE ENERGY RENOVATIONS IN HUNGARY

The strategic frameworks of the project have been outlined by the following processes and factors.



**EU targets** – The European Green Deal and the Fit for 55 package have drafted a clear action plan in the interest of the achievement of the climate policy targets, which vigorously incites the governments of the Member States of Europe as well as other economic and financial actors in order that they would take significant steps to timely achieve their climate protection targets.



**Lack of appropriate subsidies** – Currently as well as throughout the entire project period, subsidy for citizens which could have been designated to energy renovation does/did not exist in Hungary. Available subsidy or credit products were not linked to any criteria concerning energy saving and/or reduction of greenhouse gas emission. Green financial products designed for the population started to appear only in the last 1-2 years. Currently policy aid instruments that encourage buying or renovating homes compete with products available on the money market; synergies among subsidies and credits – i.e. combined financial products – could unlikely appear.



**Hungarian policies lesser inciting energy efficiency** – Already at the time of project planning it was well-known that notwithstanding the undoubtedly favourable impacts that the reduction of the overhead expenses exercised on the population (affordability), the payback period of energy investments will increase, which during the last decade did not encourage energy modernisation of residential buildings.



**Uncertainties concerning financial resources expected from the Union** – The Union's multi-year programming frame for Hungary (2021-2027) and the subsidies granted by the resilience and recovery facilities play determinant role in the execution of the energy investment measures planned by the government. The uncertainties regarding the access to these resources exercise unfavourable impact on the planning and implementation of energy-focused home renovation programs.



**COVID** – The project implementation was significantly hindered by the protective measures against the coronavirus pandemic. Due to quarantining between March 2020 and June 2021, the project communication in its entirety had to be relocated to the online space which exercised its unfavourable impact primarily on the establishment of new contacts.



**Energy crisis** – Currently the owners of residential properties are concomitantly impacted by high energy prices and the increased costs of investments and credits. In parallel with that, however, by the end of the tender process, the owners of family houses have become more motivated regarding the reduction of their overhead expenses; the topic has become increasingly popular.



**Problems of the construction industry** – During the coronavirus pandemic the supply chains became untidy, later certain construction industry products became hardly available due to the accelerating inflation. In Hungary masses of skilled workers are missing from the construction sector, which makes renovations expensive and hardly plannable. Citizens in general distrust of the construction industry, high quality renovations are impeded by extensive grey and black economy, as well as by the lack of contractors and experts having appropriate professional knowledge.

# 10 MOST IMPORTANT RESULTS OF THE RENOHUB PROJECT

## 1.

### RenoHUB model

Mapping OSSs, designing toolkits, customer journeys, business models applicable to local circumstances, equally for family houses and condominiums. Replication plan for in addition to the model currently in operation.

In the course of implementing the RenoPont customer journey we laid emphasis on the realisation of a coordinating OSS model, i.e. in addition to providing basic information, we intend to coordinate all of the actors participating in the energy efficiency renovation process and bring them into contact with renovators. Thus engineers, contractors, providers of financial services could equally be found in the RenoPont database and we could assist renovators at every point.

### RenoPont customer journey – 8 steps of a RenoPont renovation

#### 1. Information collection

Collect information! Visit our homepage and get acquainted with the most important pieces of information about energy renovation!



#### 2. Personal consulting

Book an appointment for free consulting.

#### 3. Energy survey

Accurate survey is the basis of a good plan..



#### 4. Review of the financial options and finalisation of the renovation plan.

We assist in both!

#### 5. Preparations for renovation

Financial and bureaucratic issues, searching for implementers and contract conclusion. To all these we have collected several materials for you in our Knowledge Store.



#### 6. Implementation under technical survey

By all means you should employ a technical surveyor in order that an expert would check the work performed by implementers!

#### 7. Takeover and certification

A new energy certificate is the authoritative recognition of the energy efficiency of your home



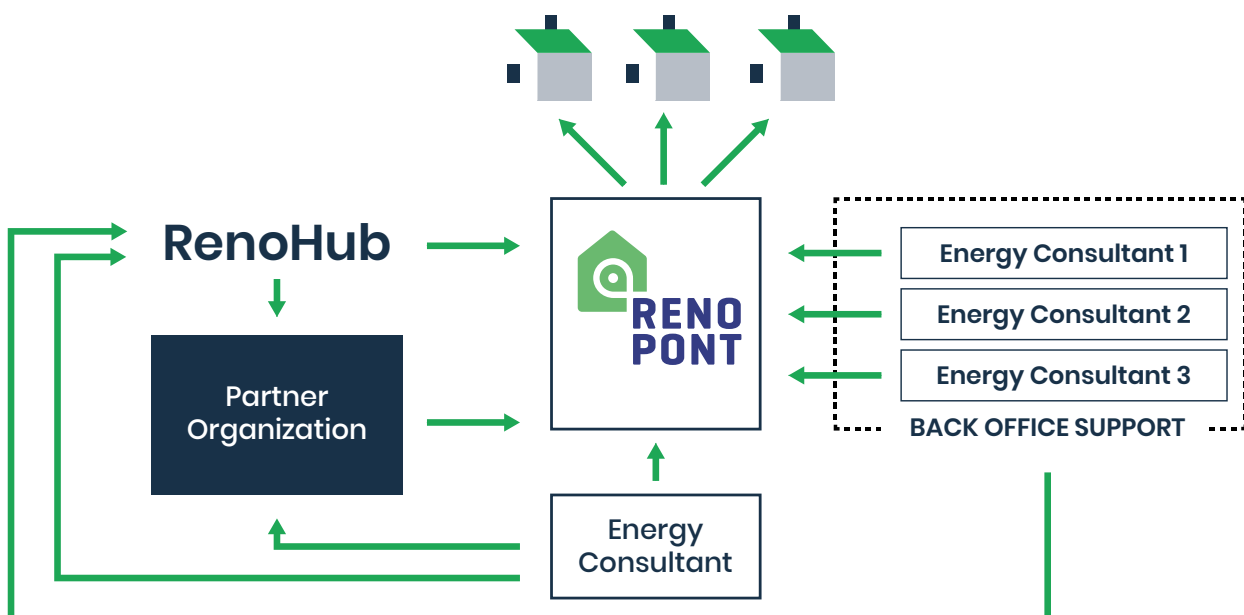
#### 8. Congratulations, you are ready!

Finishing touches, feedback, guarantees, proper use – hints and advices are awaiting you on the homepage.

Basically, RenoPont offices are operated in two business models.

**One is the partnership model**, where a non-professional partner (e.g. a local government) houses our office. Here three sub-models have developed:

- 1.** Local government ensures office space and the members of the MEHI staff act as consultants. This model operates in the office opened in cooperation with the Budapest Municipality. However, the replicability of this model is rather restricted since it is dependent upon the capacities of MEHI.
- 2.** Office space is ensured by the local government and a member of the staff of the local government acts as a consultant. RenoPont offices in Sopronkövesd and in the 1st district of Budapest operate under such model. Our experiences suggest that this model is the least viable because local governments can typically ensure just 1-2 hours consulting per week and the consultant although has participated in RenoPont consultant training, is typically not an expert. We do not plan to open and operate offices under this model in the future.
- 3.** Office space is ensured by the local government and consultancy is provided by an external professional firm/person (mostly an energeticist). This model is in operation in the RenoPont offices located in Szentendre and in the 11th district of Budapest. A great advantage of this model is that such external energy consultant works at market terms thus better quality is ensured on even several days per week. Currently in the Szentendre office the local government pays hourly fee for the external consultant (who refrains from offering his own services to clients), whilst in the office in the 11th district the consultant works for free, meanwhile he may perform for-fee technical survey and issue for-fee energy performance certificate for clients visiting this office. Experiences suggest that this model is the most viable and most replicable, therefore this model-version is in the focus of future developments.

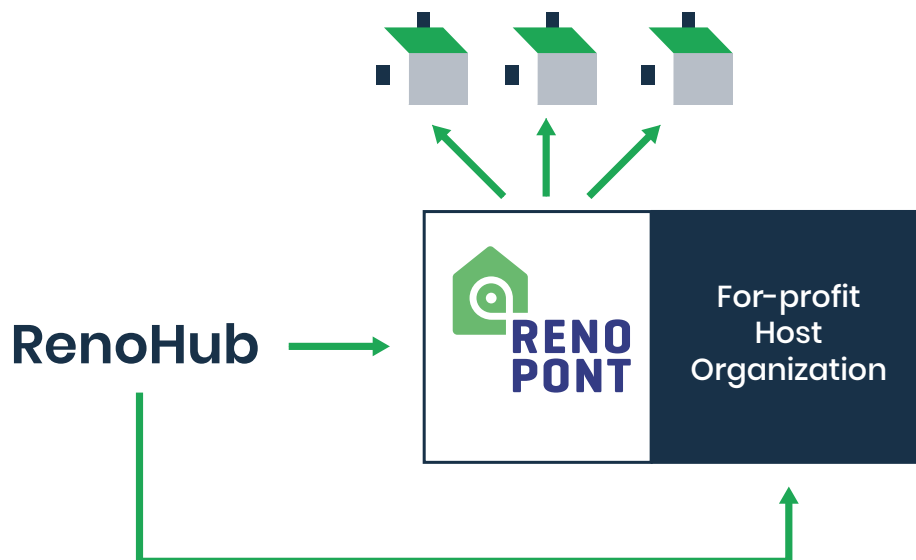


**The other version is the entrepreneurial model** that has been tested by IMRO in Nagykanizsa and by MCSTE in the office located in the 3rd district of Budapest.

In the case of the entrepreneurial model RenoHub cooperates with a profit-oriented host organisation having proper technical knowledge. Such enterprise is typically an engineering bureau specialised in energy modernisation of buildings; meanwhile, according to our experiences, enterprises with rather different professional profile are interested in opening RenoPont offices.

The advantage of the entrepreneurial model is that the partner, being a profit-oriented firm itself, performs advertising and marketing activities better than a local government partner, and is able to pay monthly franchise fee.

According to the plans, the country-level extension of the office network will be done under franchise scheme. The aim is that RenoPont becomes a country-wide network with unified visual representation and service structure, which will be operated by professional enterprises and consultants at market terms. Thus they will contribute to the maintenance of the RenoPont website, to the costs incurred by a RenoPont central coordinator and therefore to the improvement of the services.



## 2.

### RenoPont online platform

Following lengthy preparations, in November 2021 a website – unique in Hungary – was launched, which can assist in energy efficiency renovations: RenoHUB project presented the website of the RenoPont Energy Home Renovation Centre



The RenoPont website provide niche services and information for interested parties and will escort them along the renovation process, answer their questions eventually raised, motivate them to start deep renovation, assist in planning and in guaranteeing high quality results. The most important sections and services on the website:



#### Benefits of deep renovation

Many of the renovators are not aware of the multiple benefits of deep renovation. This section explains benefits in addition to reduced overhead expenses and increased comfort: deep renovations contribute to healthier, more aesthetic, more silent homes, to the increase in the value of the real estate and to its safer operation.



#### Good examples

Textual and videoed good examples of renovations of family houses and condominiums which resulted in significant energy saving. The status as before renovation, the measures aimed at modernisation, and results achieved in energy savings and comfort are presented.



## Energy saving calculator

A calculator based on the building typology elaborated by the Budapest University of Technology and Economics, on the basis of the given real estate of the renovator will calculate the estimated energy consumption and energetics categorisation of the real estate and informs on the actual status of each structural element. Elaboration of reiterated calculations enables comparison among various renovation measures and their combinations, since the calculator can indicate which measure would entail how much energy saving.



## Energetics experts, energy performance certificate

Appropriate planning of renovation is an issue of cardinal importance, therefore detailed information has been elaborated on energeticians, energy performance certificates, energy surveys and renovation plans. Thus renovators can have access to appropriate information and can be sure that significant energy saving would be achieved through appropriately planned renovation.



## Information about financial possibilities

If the enquirer has already opted for the starting of the renovation, he should importantly be able to get information on the available financial resources, to get acquainted with the realisable technical content. This section explains the state subsidies, commercial credits, local governmental subsidies, as well as the possibilities available for condominiums and small enterprises.



## Database of reliable experts and contractors

A properly planned renovation could achieve the best result only if the implementation is of high quality. To this end the website offers pre-qualified experts who on the basis of their former performances, references, liability insurances, public debt history and complaint history can expectedly perform energy renovations excellently.



## Information assisting in selecting materials

For the selection of appropriate construction materials characterised by proper cost/value ratio it is indispensable that renovators are aware of the characteristics, advantages and disadvantages of the different product versions. The material selection information explains differences between wooden and plastic doors/windows, different systems of gas-heating and heat pumps, and the features of EPS and mineral wool heat insulations.



## Downloadable default documents

Documents related to family houses and condominiums can be downloaded from the website, which can be of assistance in the process of preparation, planning, implementation and monitoring. Comprehensive entrepreneurial contracts, quotation requests and condominium owner assembly protocols can be found in this section.



## Glossary, frequently asked questions, disbeliefs

In the course of a renovation many unknown terms might appear whose short and intelligible explanation can be found in the glossary. The website mentions disbeliefs concerning heat insulation, doors/windows and/or new heating systems in order that fake information would not withhold anyone from renovation, and products, processes that do not produce proven energy saving result would not be used.



## Energy saving hints

These operating advices are useful mostly after renovation but it is worthwhile observing them even without modernisation. 15 or even 20% energy saving can be achieved without investment, just through changed behaviour.



## Appointment booking via website for personal or online consulting

In order to avoid waiting in the RenoPont offices, it is possible to book an appointment via the online system, for cost-free consulting in an office one's convenience. Online consulting can be utilised also by those who are unable to make use of personal consulting, due to geographical distance.

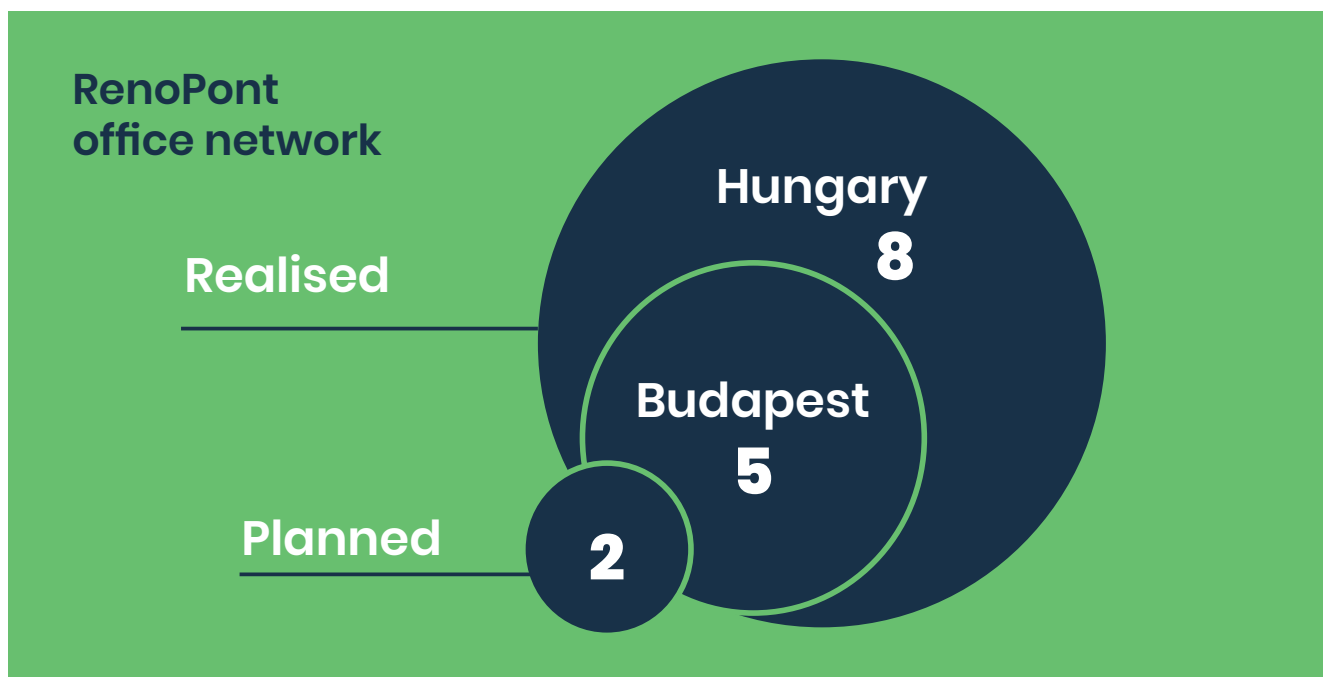


# 3.

## RenoPont office network and customer journey



One of the greatest successes of RenoHUB is that instead of opening 2 offices undertaken originally, 8 offices have been opened during the project period thanks to the fact that several local governments and enterprises recognised the possibility intrinsic to one-stop-shopping consultancy. These partners undertook to ensure premises and staff for local RenoPont offices. Renovators are received in Óbuda and Nagykanizsa under the entrepreneurial model, in Sopronkövesd and Budavár by members of the staff of the local government; whilst in Újbuda and Szentendre in the office space of the local government by external energetics experts.



Consultants of the first two offices have been selected at the end of a 4-day training course, from among trainees who were best motivated and reached the best results in the exams. Members of the staff of the rest of the offices acquired RenoPont knowledge from videos of consultant training and the operator manual, and had to give evidence of their knowledge in exams. Consultants brush up their knowledge in the frames of monthly meetings where they can discuss the latest actualities concerning renovation, can share their experiences with each other and ask questions. Each of the consultants has his/her own speciality; among them there are energeticists, bid writers, condominium experts, implementers.

For managing the data of their clients, the consultants use a Customer Relationship Management (CRM) system inserted in the [renopont.hu](http://renopont.hu) website, where the data of the renovators and the place they occupy in the renovation process can be captured in the interest of facilitating any future consulting; also, data of the offices (business hours) can be managed, data of new experts can be registered and a systematised to-do-list can be viewed at a single place.



If a prospective renovator studied the website and opted for personal consulting, he should register to the website and book an appointment for consulting that could take place online or in person. After the appointment has been booked, an e-mail will be received from the consultant, which provides detailed information concerning things to be presented during the appointment (e.g. architects' plans, energy performance certificate, invoice of the overhead expenses), in order to be provided with better grounded renovation advices. In the course of the consultation the most important features of the real estate will be evaluated and possible modernisation options will be explained. Advantages, disadvantages as well as the auxiliary works and costs of the different versions will be explained, too. If the renovator would opt for the next step, he will be offered a reliable expert (energeticist, implementer) who is able to take the next appropriate step in renovation. Modernisers may enquire any time about the successive actions via telephone or email, or personally. Should they not show up within 2-3 months, consultants will approach them via email, asking whether or not they could be of any assistance, thereby boosting the realisation of the most possible modernisation.

Joining of new offices is helped by the Operator Manual (Operátor Kézikönyv) that discusses not only the tasks of the consultants but is also a collection of frequently asked questions and the answers to them furthermore discusses the operation of offices in detail.

# 4.

## Market research: motivations and obstacles concerning renovation

In order to make the RenoHUB model as effective as possible in helping energy-efficient renovations of residential buildings, our first research focused on getting to know the key player in the entire renovation process: the homeowners renovating their homes. Through a 3-day online blog and four focus group interviews, we got a complete picture of why someone wants to renovate (motivations), why people start a renovation (drivers), what their fears and concerns are, whether those will be proven later, and what kind of support homeowners would need throughout the renovation process – in fact, what they would expect from RenoHUB’s service.

Why are not enough energy efficient renovations realised?		
<p><b>LACK OF MONEY</b></p> <p>Financing renovation is one of the most critical points: lack of resources at family houses and at condominiums, too</p>	<p><b>LACK OF INFORMATION</b></p> <p>They don't know how to start the process; why is it worthwhile, what will be the benefits</p>	<p><b>LACK OF MOTIVATION</b></p> <p>"This will never pay back, it isn't worthwhile." "The boiler still operates"</p>
<p><b>DRUDGERY, LACK OF CAPACITY</b></p> <p>"I am unable to deal with this, to organise, to steer." "They will destroy the flat."</p>	<p><b>LACK OF SKILL</b></p> <p>They don't know how to manage a complex process, what to scrutinise.</p>	<p><b>LACK OF CONFIDENCE</b></p> <p>regarding results, experts, implementers</p>

Source: RenoHUB survey, 2020

Why do we renovate anyhow?		
<p><b>AESTHETICS</b> <b>IT WILL BE MORE BEAUTIFUL</b></p> <p>Nice, clear, cultured, modern home instead of the ugly, worn out, old fashioned one</p>	<p><b>COMFORT</b> <b>IT WILL BE WARMER</b></p> <p>Warm walls, floor, instead of the draughty, cold, badly insulated flat</p>	<p><b>MONEY</b> <b>IT WILL BE CHEAPER</b></p> <p>Lesser overhead costs, lower invoices</p>
<p><b>CONTROL</b></p> <p>Reliable, better regulated, frugal heating, window, boiler, etc.</p>	<p><b>SAFETY</b></p> <p>Carbon-monoxide safety, burglary protection</p>	<p><b>HEALTH</b></p> <p>Elimination of vapour, mildew, chill and diseases of the respiratory system</p>

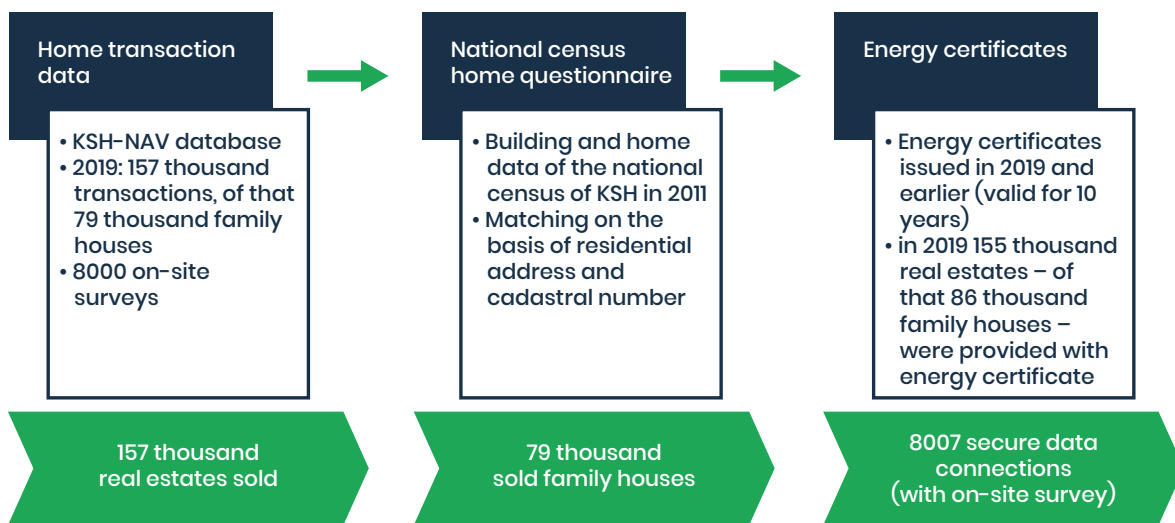
Source: RenoHUB survey, 2020

In addition to the above results, one of the most important lessons that could be learnt from the researches was that people think of renovation and not energy efficiency therefore it is worthwhile to approach them from aesthetics and comfort, since in 2020 these were the most important motivations that drove people into renovation. Since then, imputably to the energy crisis, lower overhead expenses are much more appreciated.

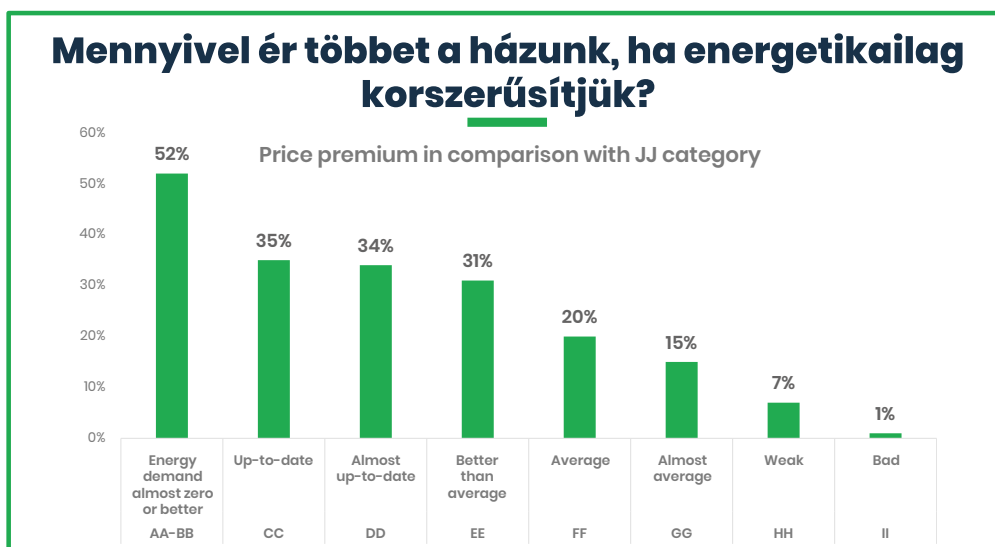
# 5.

## Statistical research: by how much does the value of a real estate increase following renovation?

In order to provide renovators with further motivation, we have established a research team in cooperation with the Department of Housing Statistics of the Central Statistical Office (KSH) and EL-TINGA, to be able to determine the changes in the value of real estates if they are renewed in terms of energetics.



In the frames of this research, by way of interconnecting the databases of KSH, the National Tax and Customs Administration (NAV) and the Lechner Knowledge Centre, we have examined factors impacting the market price of 8000 family houses. According to our results homes whose energy demand is close to zero (BB energetics category) worth almost 50% more than buildings with similar features but belonging to the worst energy efficiency category (JJ). If a family house in the average category (FF) is modernised in terms of energy efficiency, this will expectedly worth more by 20% on the housing market, which means that after ascending by only one-two categories over the worst one, the price increase is obvious.



On the basis of statistical results we may come to the conclusion that in comparison with smaller interventions, the larger ones have a relatively better return in the increase of the real estate value. From the aspect of the expected value increment, the higher the price level on the local housing market, the more attractive the energy efficiency investments can be; meanwhile, where market prices are lower, the costs of renovation can easily exceed the amount of the expected value increment.

# 6.

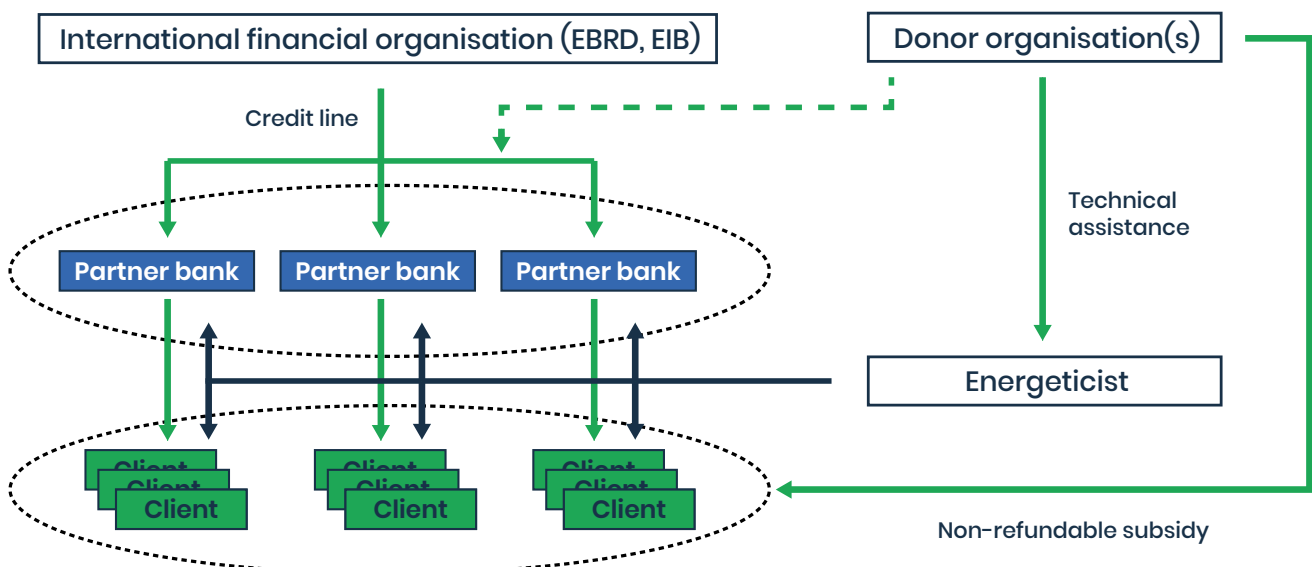
## Innovative financing experiences

An integral part of the RenoHUB project was the review and evaluation of those financing constructions that could with good chances be adopted to the domestic financial environment. These instruments are built partly on money market resources combined with non-refundable subsidies and partly on the specific features of green investments. The following solutions were discovered:

- Combined subsidy and credit products;
- EIB ELENA program;
- Invoice-based financing;
- Green mortgage loan; and
- Façade leasing.

### 6.1. Combined subsidy and credit products

The combined subsidy and credit constructions are financial instruments developed by international financial institutions, which could, among others, be applied to support citizens' sustainable energetics (energy efficiency and renewable energies) investments. Loans are placed through the local partner-banks. Non-refundable subsidies that are granted typically by a state, a region, a local government or donor organisations, will be dedicated on the one hand to investment funding and on the other hand to financing technical preparations and surveys.



Benefits provided by combined credit and subsidy constructions:

- simple and transparent scheme, and it is easy to find the algorithm for the technical and financial procedures;
- simple method for remunerating energy efficiency investments implemented by final beneficiaries, dependently upon the energy saving ratio and/or the complexity of energy efficiency development;
- savings verified by expert;
- fair chance for commercial banks for greening their portfolio and for adopting good bank practices.

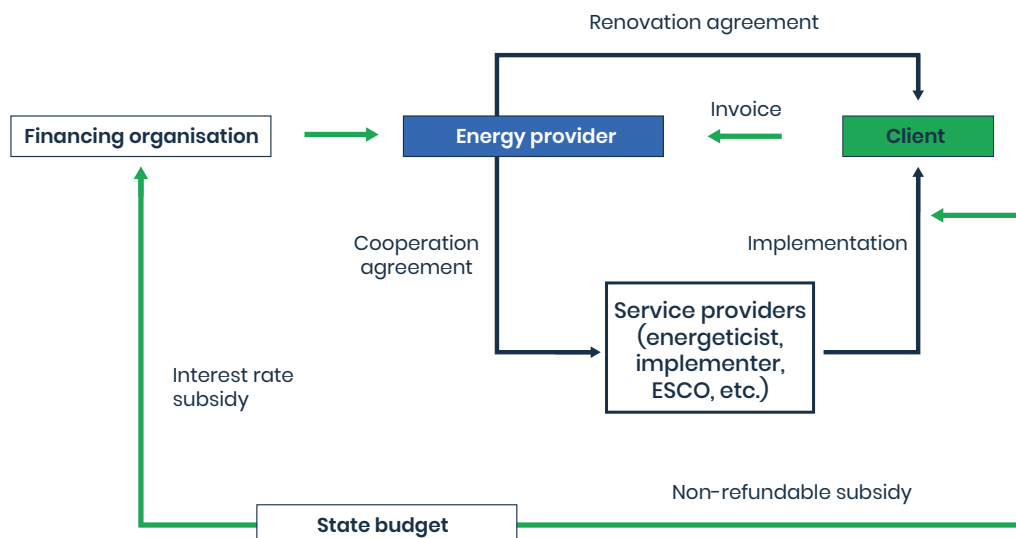
## 6.2 ELENA program of the European Investment Bank (EIB)

ELENA initiative provides primarily local and regional governments with expert assistance in preparing and implementing large scale (investment value at least EUR 30 million) energy efficiency, renewable energy and urban transportation investment programs. A basic expectation is that the planned developments are financially sustainable and are financed primarily not from Community funds but from external (private and money market) resources. Activity supported by the program could be the elaboration of – among others – feasibility and market studies, business plans, technical surveys and energy audits, financing structure, and financing models; public procurement procedure management, preparation of contracts.

The experts of RenoHUB, in partnership with local governments, initiated the involvement of the resources of the ELENA program into the condominium segment. Currently the implementation of the executive structure and reconciliations with interested local governments and the experts of EIB are in progress.

## 6.3 Invoice-based financing

A promising form of invoice-based financing is that energy providers finance green investments (e.g. heat insulation, modernisation of heating systems) that contribute to the improvement of the energy efficiency of the real estates of household and corporate clients. The essence of invoice-based financing is that the costs of purely energy investments are financed by the public energy service



provider for its clients, which will be refunded by the clients concerned on the invoices issued by the public service provider.

Invoice-based financing improves the risk profile of loans as it incites the borrower to refund the loan in order to maintain energy provision. In addition, after energy renovation the building's operating costs will be lower. If invoice-based financing is applied, the energy provider could easily control and attest energy saving, and eventually connection could be established with the Energy Efficiency Obligation Scheme. Also, this system enables the integration of non-refundable subsidies; furthermore external service providers (energeticist, implementer, ESCO partner) can be involved into the value chain.

## 6.4 Green mortgage loan

Green mortgage loan is directed to buildings that are green or can be "greened". In the frames of green mortgage loan the bank or the mortgagee offers favourable conditions for the buyer of a home if he can prove that the property in respect of which the loan is borrowed complies or after renovation will comply with certain energy / sustainability expectations. Green mortgage loan has its raison d'être provided that in the case of buying/building and/or renovating residential buildings (family houses and condominiums) or commercial buildings it can be proven that:

1. energy performance corresponds to or exceeds the standards relative to the best market practice, in harmony with the current legal requirements of the Union; and/or
2. expected energy saving reaches at least 30%.

Since 2020, the National Bank of Hungary guarantees favourable capital requirement conditions thereby supporting Hungarian banks in placing energy efficient loans. The bank of issue encourages more and more Hungarian credit institutes to lend loans for energy efficient housing purposes.

## 6.5 Façade leasing

The façade leasing is a pilot project of the Delft University of Technology (Nederland) which is aimed at the improvement of the energy performance of buildings and at reducing the impact exercised on the environment by buildings by way of leasing the façade of the owner's building to an energy development firm and leasing the equipment thereon installed from such developer. Multifunctional façades produce building envelopes that are able to save significant volume of energy and meanwhile provide continuous interior comfort services.

At the same time, this model is an innovation in the field of business and steering techniques, which includes new financing, contracting and operating methods related to such new and extremely complex architectural systems; could ease the complicated shift becoming necessary during the entire construction process. The model contributes to the spreading of the circular economic concept.



# 7.

## Training materials and trainings for RenoPont consultants

Trained consultants should be employed to operate RenoPont offices. The RenoHUB project undertook to deliver a 40-hour training course to consultants who have no energeticist's or engineer's degree but possess some sort of professional knowledge. Based on that a complex set of knowledge can be appropriated with the help of which they can provide people facing renovation with complex and professional advices.

The training included architecture, energy and finance materials, furthermore an on-site exercise and a communication training in order that candidates could properly communicate with future clients.

28 applications were received in response to the publicly announced consultant (office operator) training. Out of the applicants 22 persons finalised the 40-hour training and passed exams successfully. One of the great results of the training was that out of the 22 persons passing the exam successfully two persons were given the possibility to start working in the two (MEHI) offices located in Budapest, just opening.



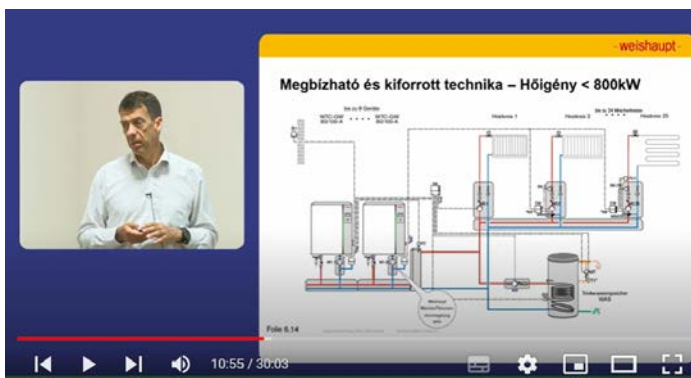
# 8.

## RenoPont expert training and quality assurance via the Partner Program

RenoPont expert training was delivered in July 2022. When the training syllabus was compiled and scheduled, several aspects had to be taken into consideration such as the time scarcity, seasonal workload and demands of the experts.



As a result of the above, the RenoPont expert training has been implemented in the form of a professional conference where the lectures have been recorded and thus a high-quality training material has become available online for experts joining successively. Taking – now individually and at any convenient time – and passing this training is a condition necessary for joining RenoPont Partner Program.



23 experts took personally part in the training on the spot, and after the training the Partner Program was started. Since then, 34 qualified experts joined the Program. The aim of the RenoPont Partner Program is to engage qualified partners, such as energeticists, engineers, financial advisors and prime contractors furthermore firms dealing with the installation of heat insulation, windows/doors, heating systems, solar cell and heat pump systems, in order that RenoPont could be able to recommend properly trained and reliable experts for prospective renovators.



**RENO PONT** Energetikai Otthonfelújítási Központ

2022. június 1., szerda, 9.00 – 14.30

**RENOPONT PARTNER PROGRAM**

Bemutató nap

Trendek az épületenergetikában  
Hőszigetelés  
Fűtés, áramtermelés  
Nyílászárók és szellőztetés

Regisztráció

Lurdy Konferencia- és Rendezvényközpont

Logos: NYUGODT ÉPÍTKEZÉS, ENERGIKLUB, MEHI, RenoHub

## The expert training syllable:

### I. INFORMATION ABOUT THE RENOPONT SERVICES AND ABOUT ENTREPRENEURSHIP

- Introduction, what is RenoPont
- Legal information related to entrepreneurship, client management, contract conclusion
- Guarantee and warrantee issues, debate settlement

### II. ENVIRONMENT-CONSCIOUS CONSTRUCTION WORKS

- Trends in building energetics
- Role of building renovations

### III. VOCATIONAL LECTURES

- Heat insulation (Polystyrene based heat insulation, mineral wool heat insulation; quality of heat insulation systems and installation)
- Heating, electricity generation (traditional heating systems, heat pump – heating-cooling, solar cell systems)
- Windows/doors and ventilation (windows/doors, ventilators, shading techniques, air- and vapour-tightness)

## Pictures of the event:



## 9.

## Collection of experiences: feedbacks and pilot projects

As a result of online and office-based enquiries, owners and operators of real estates could, in the ideal case, achieve measurable improvement in energy efficiency.

### Before:



### After:



This condominium in Keszthely, originally in category F, ascended to category B; overhead cost invoices decreased by more than 40%. Further information about this renovation can be found in good examples of RenoPont.

Thus the information available online and in the offices should encourage the owners of real estates to utilise the RenoHUB database and engage the necessary experts and contractors, and employ them to perform preparations for the renovation and to make the necessary calculations. These could be followed by implementation in guaranteed quality, which would achieve targets set in the plans.

In the course of the RenoHUB project, pilot buildings mirroring the features of the domestic building portfolio could produce useful information regarding both, condominiums and family houses.

When a pilot project is selected, in addition to the physical parameters of buildings, the expectations, ideas, operating habits of the owners as well as their financial resources necessary for renovation should be contemplated.

These pieces of information could be acquired only from the possible owners on the basis of professionalism attributed to and confidence vested in RenoPont offices in reward for their good work. Important role is played by harmony, the articulation of the common interest of clients, offices and experts. Division of the services that can be utilised by the client (technical, financial and legal) and the creation of the complex harmony among them was another decisive professional element in establishing confidence.

Pilot buildings were used to elaborate a professional protocol whose utilisation means safety and predictability for all actors, meanwhile it would ensure flexibility that is necessary for taking into consideration the unique features of the real estates and the specific expectations of the owners.

Following the utilisation of a renovation consultation in an office, in the case of condominiums a typical procedure develops as follows:

- 1.** General information about the possible energy efficiency interventions and about services available in RenoPont offices.
- 2.** Building survey procedure
- 3.** Elaboration of an offer and a decision-preparatory material based on the energetic features of the building, which contains the following:
  - Presentation of the energy efficiency results of the energy renovation
  - Description of the technical contents of the energy renovation, together with the auxiliary works
  - Draft budget of the energy renovation broken down by households
  - Options and obligations concerning the acquisition of resources necessary for energy renovation, broken down by households
  - Other proposals, timetable
- 4.** Presentation of the finalised decision-preparatory material.

The documentation contains the following:

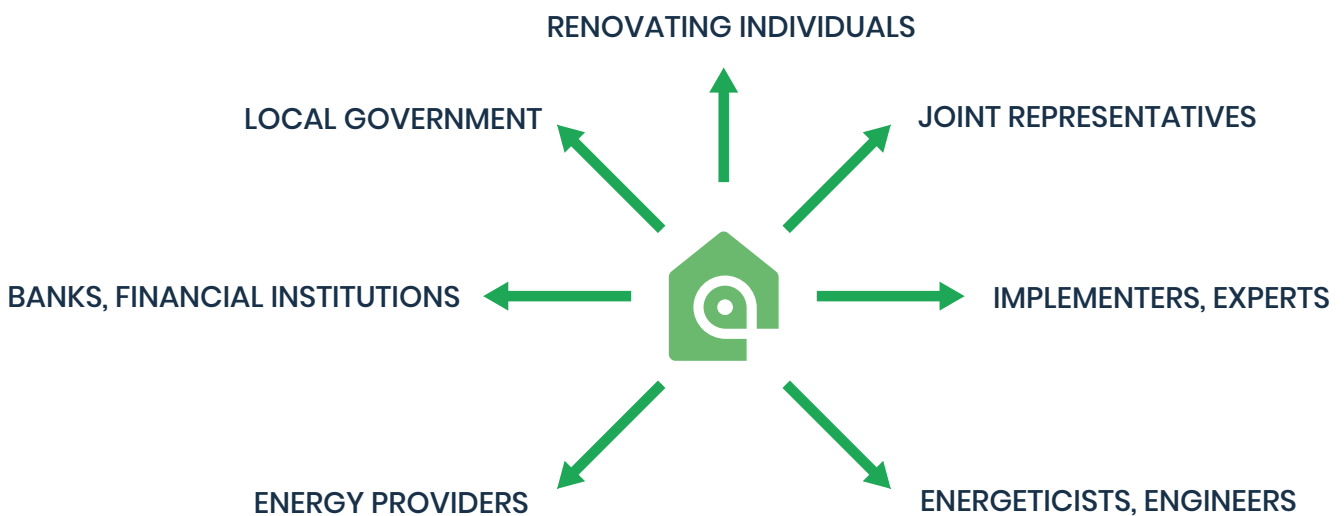
- survey methodology and external factors that might influence the results of the survey (e.g. inflation, exchange rate risk, etc.),
- rate of improvement of energy efficiency,
- preliminary cost estimates based on the technical parameters,
- amount of obligations per each apartment, calculated on the basis of financial data of the building,
- summary; recommendation concerning feasibility options and scheduling.

From the aspect of the work performed in the offices, a strategic target could be the complete implementation that is able to engage into the renovation procedure all of the actors along the value chain within the construction industry. In the future, as a result of vertical and horizontal networking, the RenoPont office network could ensure the conditions necessary for this. Establishment of relationships could be a 2-3-year long process; based on experiences gained so far, this could bring the results in the future.

# 10.

## Networking: connecting domestic and international stakeholders

RenoPont aims to cover the entire renovation chain, to establish relationships and to furnish renovators with the services.



### Local governments

During the period of its existence, 3 and a half year, the RenoHUB project contacted almost 30 local governments. In view of the fact that more and more Hungarian local governments possess SECAP (Sustainable Energy and Climate Action Plan) or some sort of climate action plan, it is in their interest that the inhabitants of their settlement implement energy efficiency measures and/or increase the utilisation of renewable energy. In view of their financial constraints, local governments could in the best case contribute to the establishment of a RenoPoint office by ensuring premises, but rather they can ensure only opportunity for promoting RenoPont and popularising same among inhabitants.

### Banks and financial institutes

During the project period relationships have been established with 15 banks or financial organisations. Work progressed in close cooperation with the Hungarian Banking Association as well as with the National Bank of Hungary. Hungarian banks more and more strive “to green” their portfolio, however, so far just a few financial institutes launched any product that would expressly reward energy efficiency aspects. The RenoHUB project strives to popularise all potential bank products with renovators, meanwhile its long-term target is to establish permanent cooperation with banks, either in the field of office network operation or within a loan application procedure.



## **Energeticists, engineers, implementers, experts**

During a renovation procedure, renovators should face several technical issues that call for various experts. The RenoPont Partner Program and an expert database (szakember adatbázis) available on the renopont.hu site have been created in the frames of the RenoHUB project. The aim of the Partner Program is to classify energeticists, engineers, implementers / specialist implementers and experts, and enlarge the RenoPont expert database in order that reliable experts could be recommended for renovators.

## **Energy providers**

In Hungary RenoPont could establish lasting cooperation with the Hungarian Electrical Works plc (MVM) being the only universal service provider. There have been several discussions with MVM: a key element of the cooperation could be channelling the requirements concerning compliance with the Energy Efficiency Obligation Scheme (EKR) into the citizens' energy efficiency renovations. However, in this setup a determined will of the senior management of MVM is by all means necessary in order that the cooperation could be operative.

## **Joint representatives, condominium managers**

Primarily in larger cities, a large part of real estates is made up of condominium units where the owners of the apartments could exercise slight impact on the energy efficiency of their flats, because neither the heat insulation of the building, nor – in most cases – the heating system is subject to an individual's decision but the consent of the rest of the residents is requested. In this process great responsibility is burdened on joint representatives as they are the ones who can foster the renovation of a condominium. RenoPont has established relationships with experts possessing decade-long experiences in the preparation and mediation of decisions concerning condominium investments.

## **Individual renovators**

The RenoHUB project is targeted on individual renovators since they possess the real estate and they are the ones who could make decisions regarding the renovation of their homes. In the course of renovation, in addition to financial difficulties, homeowners should face several challenges: lack of information, distrust, passing decisions concerning complex issues and the management of a lasting and complicated process. RenoPont, as a one-stop-shop consultant network assists in taking this burden off the shoulders of its clients.

## **International relationships**

In the course of the RenoHUB project we have joined the community of European one-stop-shop initiatives. We have got acquainted with OSSs in operation for a long time, such as Reimarkt in the Netherlands, or the recently established Ekubirojs in Latvia. As a part of the mentor program of the EUROPA project, consultants of RenoPont participated in a study tour in Latvia where they could get acquainted with the experiences of the German eza! and the Latvian Ekubirojs. In addition, the achievements of the RenoHUB model and project have been presented in several countries, e.g. in Portugal, Italy, Greece.

# CONCLUSIONS, PROPOSALS

Hereinafter some proposals are collected which serve as lessons learned from the RenoHUB project and could boost the successfulness and the quality of other, similar projects.

- The fate of the project is very much dependent upon the regulatory environment; it is worthwhile to be prepared for better and worse scenarios (e.g. as regards the availability of supporting programs).
- Business development may be a great challenge; it is worthwhile to elaborate plans with external assistance, with facilitators, expert consulting. Also, it is proposed to plan legal expenses with a safety margin (specifically in view of the website that manages client data, and the GDPR-relevance of the CRM system).
- It is worthwhile to pay continuous attention to competitors; to cooperate with them or to supplement their services; to be strong in the fields where they are deficient.
- Preliminary market research was very useful, although it would have been desirable if in view of the changing circumstances, qualitative research could be repeated and/or would have been better supplemented with a business survey and followed up by a representative survey.
- Due to the difficult financial situation of renovators, it is worthwhile to develop customer journey and consulting to support sectioned deep renovations, in order that owners of family houses as well as condominiums could be assisted in various phases of renovation.
- It is difficult to recruit a good communication team that is able to provide added value that helps in excelling in online communication. Therefore, as regards communication tasks, it is worthwhile to include into the request for quotation those aspects that enable quality assurance.
- Since the beginning of the COVID pandemic, it is difficult to attract people to information-days, free snacks are not charming enough. Events where energy issues are discussed should preferably be held online; more people will join from home not mentioning auxiliary financial and environmental benefits.
- Architectural experts can hardly be persuaded to participate in events or info-days; it is much more reasonable to see them personally and talk to them, preferably during the off-peak season when construction industry is not so busy (e.g. in winter).
- It is worthwhile to plan projects in such manner that certain procedures – for instance marketing and communication plans and any campaign later – are managed by the same team of experts, thus the provisions drafted in the strategy would yield much better.
- Some social media campaigns performed on own interface have relatively few yield; the effect is much bigger when RenoPont was advertised on the site of a well-known person. It is not really worthwhile to spend a lot of money on for-fee advertising; rather the people got acquainted with the project on the ground of recommendations and on professional forums. Via the social media it is hard to incite people to act.
- If in the frames of a project a homepage is created, it is proposed to create same in modular system and not in a given language in order that in case of necessity the replacement of the existing IT team and the further development of the homepage could be easier and not be dependent upon a given subcontractor.
- As regards consulting, nowadays there is a demand for online appointments, too, however, in the case of certain groups (e.g. elderly people) – at least in Hungary – it is still unimaginable that before a large investment the renovator would not meet the consultant personally.

# GOOD PRACTICES IN THE PROJECT

As regards challenges intrinsic to the project, certain solutions applied in the RenoHUB project proved to be expressly successful. Although not all of them could be applied in other countries, the list hereunder may give useful hints to the efficient implementation of one-stop-shop projects.

## **Usefulness of preliminary researches – market research**

The practical implementation of the RenoHUB project, the shaping of the RenoPont customer journey and the structuring of the services (homepage and office network) were grounded on researches. Researches proved to be expressly useful, because RenoPont could be established with the appropriate messages and in response to appropriate demands, thus the introduction of the services was accelerated and the possibility of making mistakes was diminished.

## **Cooperation with the local governments in the office space front**

In the course of the extension of the RenoPont office network, local governments proved to be good partners, more and more of the local governments possess SECAP or climate action plan, thus for them it was a good possibility to come closer to their targets by way of opening an office. Local governments could typically ensure spaces for free or at reduced cost for the consultant offices and/or via the local communication channels they managed to reach many interested parties.

## **Banking Association: forum for dialogues with banks**

RenoHUB project wished to establish personal relationships with as many financial organisations as possible. To arrive at the first discussions was always rather resource-consuming, however, a significant advancement was when the cooperation with the Banking Association has been established, in the frames of which the Association provided a forum, thus in their thematic meetings all of their members could be provided with the results, messages and training materials of RenoHUB.

## **Experts: partnership agreement and RenoPont Partner Program for the expert database and for quality assurance**

In the course of structuring the RenoPont Partner Program, we attentively strived to achieve that partners of RenoPont would be only reliable experts. Given the fact that imputably to the nyugodtepitkezés.hu, a reputed qualification system was already in operation on the market, RenoPont concluded an alliance with this initiative, took over their expert qualification system and/or requested them to perform the preliminary classification of experts willing to join.

## **Expert training: the selection process embedded in the training is a success story**

RenoPont experts must actively participate in a 3-day training, where in addition to vocational lectures – on energy efficiency and renovation – they could educate themselves in an interactive com-

munication training and in a full-day on-site exercise. The RenoHUB consortium partners selected the first two RenoPont office-based consultant from among those candidates who declared that they are interested in the consultant jobs at RenoPont and who, at the end of the training, proved to be the most motivated, best communicating students passing their exams successfully.

### **Regular consultant meetings proved to be extremely useful**

In view of the fact that experts employed in the RenoPont offices came from various walks of life, energeticists, experienced implementers, persons knowledgeable in condominium renovation, bid writers are among them, therefore they can usefully share their knowledge via e-mail or telephone. The monthly consultant meeting is a forum for regular, continuous relationship and joint learning, where consultants in an organised framework could educate each other concerning actual renovation news, new issues and experiences.

### **Video records for posterity and for new recruits**

In view of the fact that since the beginning of COVID pandemic trainings are more and more driven to the online space, the sounds and visual images of the consultant and expert trainings have been recorded thus creating a training material that is available online. This greatly eased the future delivery and efficient distribution of the knowledge base.

### **Sweepstakes incite actions and rise interest**

In order to get feedback about the homepage, the consultant offices and the services, which would be useful for their further development, online questionnaires were elaborated and distributed among client participating in consultancy or were made available in the social media and via newsletters. Those who completed the questioner can win free energy survey – 2-3 lucky winners were drawn randomly.

### **Large population can be reached with the help of influencers**

The communication activity of the project focused primarily on online channels. Within that – strangely for the professional consortium – the largest number of reaches was produced by videos shot with well-known persons. The success of such cooperation overly surpassed the results of paid advertisements or other organic contents. RenoHUB project managed to achieve the greatest impact with videos shot in cooperation with Csaba Magyarosi influencer and Gergely Litkai stand-up comedian.

### **During idle periods, a versatile operator could assist in reaching targets in several other ways**

There are periods when few renovators visit the consultant offices – due to e.g. lack of tenders, mild winter, holiday season. It is useful if a consultant can perform professional work during such idle periods. How lucky if he possesses skills, knowledge or education with which he can help the initiative not only with consultancy but also with something else, let it be the writing of an energy efficiency study, participation in some research, writing content for or updating homepages, organising events or giving lectures.

# HOW TO PROCEED FURTHER? RENOPONT'S FUTURE

According to the plans, the RenoPont office network should be expanded and financial affordability should be achieved through the following:

- 1.** Introduction of new, market conform services (e.g. energy survey, bid writing) that would be available in RenoPont offices opened in the partnership model. These services would be provided in cooperation with contracted partners.
- 2.** In the frames of the LIFE program, Energiaklub successfully bade with several partners from the Union for the EU-Peers project, which strengthens the international embeddedness of RenoHub and is expected to assist in accessing several useful information concerning experiences gained by other European OSSs.
- 3.** Continuous development of the RenoPont homepage in order that it could be more user-friendly and accessible for a much wider scope.
- 4.** Development of services provided jointly with banks, real estate agencies and product manufacturers.
- 5.** Further development of proven energy efficiency trainings and promotion campaigns. Elaboration of a comprehensive energy efficiency training system and delivering same to as many local governments and firms as possible.
- 6.** Acquisition of resources in the frames of the Energy Efficiency Obligation Scheme (EKR): partial financing of complex condominium renovations from EKR resources and elaboration of a proposal for a catalogue card in the interest of making the attitude influencing activity to be accountable in EKR.
- 7.** Conclusion of sponsorship agreements with the corporate partners of MEHI, with – among others – manufacturers and distributors of construction products.
- 8.** Extension of the RenoPont franchise office network, mainly in rural areas dominated by old-fashioned family houses with high overhead expenses.
- 9.** Cooperation with state-controlled organisations and market actors (e.g. the Hungarian Electrical Works, E.ON or the Hungarian Chamber of Engineers) that perform or plan to perform energy efficiency consulting. The aim is cooperation or the provision of services that supplement services provided by them.
- 10.** Enforcements aimed at the maintenance and further development of the RenoPont one-stop-shop consulting network, promotion campaign among decision-makers and proposals concerning the facilitation of renovations with the application of the OSS concept.

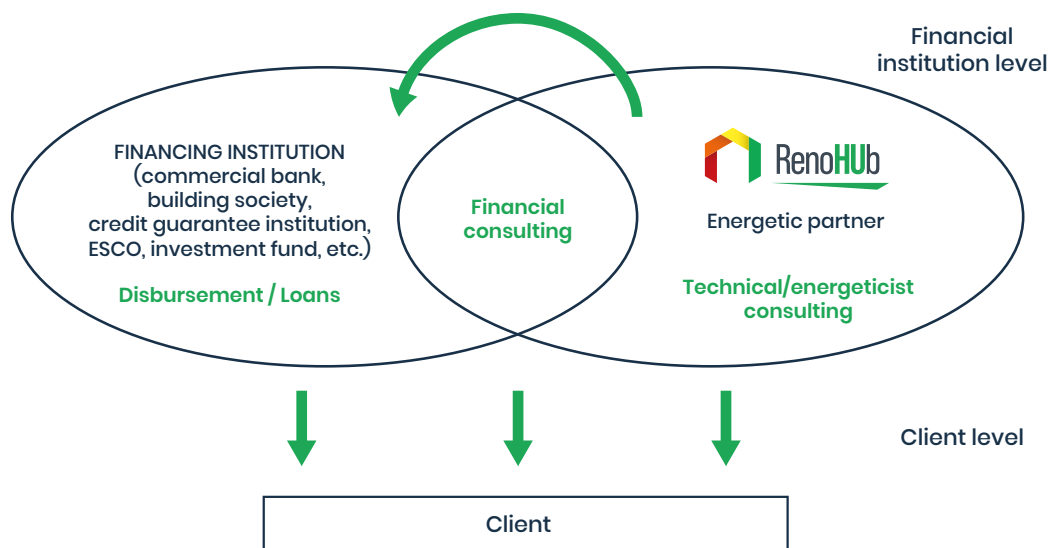
## The following partnerships are planned for the long-term maintenance of RenoPont:

- Local and county governments specifically focusing on those that lay great emphasis on the achievement of SECAP results, or that are ready to mobilise local enterprises and large corporations to contribute to home renovations, e.g. in the condominium segment.
- Financial institutions for whom the interconnection between their financial instruments and energy efficiency is important.
- Energy provider firms and auditors that plan to achieve the energy saving rate prescribed in the Energy Efficiency Obligation Scheme (EKR) for the household sector(, too).
- ESCO enterprises having a household portfolio.
- Consulting firms specialised in household energy modernisation.
- Implementers, installers, manufacturers, vendors and distributors interested in energy efficiency.

## Elaboration of the proposed cooperation framework with financial partners

Participants of the RenoHUB project have elaborated the concept of the cooperation with financial partners, commercial banks, building societies, credit guarantee institutions, ESCO firms, investment funds, etc., in order to ensure further development of the citizens' green investments even after the life cycle of the RenoHUB project.

Cooperation with the financial partners is justified on two levels: on financial institute level and on client level, too.



On the one hand, RenoHUB with its expertise is able to assist in supporting the environmental and societal sustainability of the partner institutions, on the other hand, in close cooperation with the staff of the financial partners it wishes to play decisive role in energy consulting along the entire customer journey.



### **Further information:**

#### **RenoHUB project:**

HUN: <https://renohub-h2020.eu/hu>

ENG <https://renohub-h2020.eu>

#### **RenoPont:**

HUN: <https://renopont.hu>

ENG <https://mehi.hu/en/residential-energy-renovation-renopont>

### **Videos:**

[RenoHub project summary video](#)

[RenoPoint: Save energy and money with the energy renovation of your home!](#)



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