



Certified smart and integrated living environments for ageing well

D5.2 – Exploitation and Supporting Investment Strategy

Deliverable D5.3		
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Table of Contents

Executive Summary.....	5
Acronyms and abbreviations.....	6
1 Introduction.....	7
1.1 Aims and objectives.....	7
1.2 Relations to other activities in the project	7
1.3 Report structure.....	7
1.4 Contribution of partners	7
2 Overview of Exploitable Results.....	8
3 ER01- H4L Vision.....	9
3.1 Description of the result.....	9
3.2 Ownership	9
3.3 Exploitation pathway.....	9
4 ER02 - H4L Taxonomy and KPI definition methodology	10
4.1 Description of the result.....	10
4.2 Ownership	11
4.3 Exploitation pathway.....	11
5 ER03 - H4L Certification Scheme	12
5.1 Description of the result.....	12
5.2 Ownership and post-project exploitation intentions	12
5.3 Key resources and background declaration.....	16
5.4 Related Intellectual Property Rights	16
5.4.1 Market competition	16
5.4.2 Protection strategy details	17
5.4.3 Required funding for protection.....	19
5.5 Exploration of value creation potential	19
5.5.1 Public sector client segment	20
5.5.2 Private sector client segment	21
5.5.3 Grass-roots initiatives client segment	23
5.6 Strategy for supporting investment	24
5.6.1 Preliminary roadmap & milestones of activity	24
5.6.2 Commitments to invest.....	24



5.6.3	Business cases (case study analysis)	24
5.6.4	Certification promotional package	25
6	Individual exploitation plans	26
7	Conclusions	30

Table of Figures

Figure 1	– Organisational model for the post-project exploitation of H4L CS	15
Figure 2	– Value proposition canvas	20
Figure 3	– Example of a business case for one pilot site	25
Figure 4	– H4L promotional tools	25

Table of Tables

Table 1	– Exploitation results overview.....	8
Table 2	– Post-project exploitation strategy	13
Table 3	– Cost structure	¡Error! Marcador no definido.
Table 4	– Poll results from the call for comments)	¡Error! Marcador no definido.
Table 5	– Potential risks and limitations with corrective actions	¡Error! Marcador no definido.
Table 7	– Exploitation plans for each Homes4Life project partner	26

Executive Summary

The European project “Homes4Life” (<http://www.homes4life.eu>) started in December 2018 and will end in February 2021. It aims at developing improved home environments that foster ageing people's independence, supporting them to remain active and healthy, and integrating construction and digital solutions where this is beneficial.

The purpose of this report is to present the Homes4Life Exploitation and Supporting Investment Strategy. The Homes4Life exploitation approach aims at getting a widespread adoption across Europe of the main Homes4Life Exploitable Results including:

- The Homes4Life vision document (WP2).
- The Homes4Life Taxonomy and KPI definition methodology (WP3).
- The Homes4Life newly developed and validated European certification scheme (WP4).

The exploitation strategy was developed and mapped according to the clusters of stakeholders identified in T5.1 and incorporates a strategy for supporting investment which was developed in T5.3. This exploitation and investment strategy aims at supporting and pushing for (both public and private) investment decisions in smart and resilient living environments for ageing well, based on expected returns (proven direct and indirect socio- economic and technical benefits), and by showing proof of increased returns into the building stock fit for the longevity challenge. The strategy includes several retro- and prospective analyses of pilot cases in various member states which illustrate the various business models that can be deployed to support investment decisions into age-friendly housing. It provides a quantifiable list (from both economic and social perspectives) of all the benefits associated with the developed Homes4Life certification scheme (WP4) for home and building owners, inhabitants as well as investors, building upon the field experience of CERTIVÉA with their current portfolio of certifications and their associated business & marketing model. It includes a series of tools, documents and arguments to convince real estate companies, building owners, public authorities (etc.) that the value of their Homes4Life-certified properties will increase on the market and/or that it is a part of a rational long-term housing strategy.

Acronyms and abbreviations

Col	Community of Interest
CS	Certification Scheme
D&C	Dissemination & Communication
EC	European Commission
ER	Exploitable Results
EU	European Union
GA	Grant Agreement
H4L	Homes4Life
KPI	Key Performance Indicator
LTC	Long-Term Care
PC	Project Coordinator
PO	Project Officer
VPC	Value Proposition Canvas

1 Introduction

1.1 Aims and objectives

This report presents the Homes4Life Exploitation and Supporting Investment Strategy.

1.2 Relations to other activities in the project

The Homes4Life Exploitation and Supporting Investment Strategy builds on the outputs of the other work packages, in particular WP2 and WP4 in which the Homes4Life Vision (ER01) and the Certification Scheme (WP4) were respectively developed.

The strategy is also linked with several deliverables including:

- the **Commitments to invest in H4L certified homes** (D4.6): a list of organisations that have accepted to sign a MoU / Commitment to support and/or invest into Homes4Life certified homes; these will be the primary targeted organisations which will be contacted for implementing the exploitation strategy.
- The **Homes4Life Community of Interest** (D5.1): it is a wider set of stakeholders which are also interested in the Homes4Life outcomes, which will also be prioritised when the exploitation strategy is launched.
- the **Certification Scheme Promotional package** (D4.5): it includes a series of communication materials which will support the commercialisation of the certification scheme.
- **The Homes4Life Promotional Video** (D5.5): another useful dissemination and communication tool which will be helpful to promote the Certification Scheme and to identify potential buyers.

1.3 Report structure

Section 2 of the report presents an overview of the main Exploitable Results (ERs) from the project. **Section 3** presents a detailed exploitation strategy for the Homes4Life Vision (ER01). **Section 4** presents a detailed exploitation strategy for the Homes4Life Taxonomy and KPI definition methodology (ER02). **Section 5** presents a detailed exploitation and supporting investment strategy for the Homes4Life Certification Scheme (ER03). **Section 6** presents the individual exploitation plans of each Homes4Life project' partners. **Section 7** concludes this report.

1.4 Contribution of partners

R2M is the main author of this report. UNIVPM contributed in particular to Section 3 (exploitation strategy for ER01); TNO contributed in particular to Section 4 (exploitation strategy for ER02); CER, who declared their interest in the management of the Homes4Life Certification Scheme, provided significant inputs to Section 5 (exploitation strategy for ER03), complemented with inputs from TNO and TECNALIA. All partners reviewed the entire report and described their individual exploitation plan in Section 6.

2 Overview of Exploitable Results

Homes4Life key Exploitable Results (ERs) are summarized in the table below.

TABLE 1 – EXPLOITATION RESULTS OVERVIEW

ER number	Exploitable Result Name	Short Description	Exploitation pathway
ER01	Homes4life Vision	The H4L Vision is a document providing a multidisciplinary and inclusive vision for age-friendly homes in 2040. The Vision will provide guidelines and tools for stakeholders that have to create business and policies about age-friendly environments.	<ul style="list-style-type: none"> • Public result • Scientific exploitation • Policy
ER02	Taxonomy and KPI definition methodology	The working taxonomy of age-friendly homes presents a structured and detailed breakdown of what it means for a home to be age-friendly. The KPI-framework uses the taxonomy as its structuring principle.	<ul style="list-style-type: none"> • Public result • Scientific exploitation (e.g. future research projects) • Policy
ER03	Homes4life Certification Scheme	A new European Certification Scheme for age-friendly housing in Europe. The scheme is based on a long-term vision of people's needs and requirements based upon a holistic life-course approach and a new conceptual framework for age-friendly housing (ER02)	<ul style="list-style-type: none"> • Public result • Commercial use

3 ER01- H4L Vision

3.1 Description of the result

The Homes4Life Vision defines what the future could look like if potential benefits of investment at scale in smart age-friendly living environment are fully realized. The Vision is looking ahead towards 2040, when the percentage of citizens over the age of 65 is expected to peak and so it is imperative that the European housing stock needs to adapt to the needs of a population who want to be part of society, contribute and be able to live in communities that support them to age in place and in their own homes. In particular, the Vision analysis defines how the H4L European Certification Scheme will be a strategic tool for the implementation of age-friendly environments from the point of view of the stakeholders.

Each stakeholder category must realise and become aware of how and what they could improve in their field of activities ranging from the need to change attitudes, the need to change policies or business model, the need to facilitate and encourage options for purchasing and receiving services at home, encouraging not only home ownership but also providing other options by developing strong public or social rental housing, incentivise builders through alleviation of corporate taxes. By implementing the H4L Certification Scheme the above-mentioned change processes can be further encouraged, pushed and triggered.

3.2 Ownership

The ownership is all the consortium members.

3.3 Exploitation pathway

The Vision will be exploited in dedicated actions to increase awareness about age-friendly environments for funded research, business opportunities, and policy making. In addition, scientific exploitation in the relevant fields (engineering, humanities, financial, ageing, etc.) will be carried out.

The first action will be the exploitation of the contents within the Position Paper currently under preparation by the Active Ageing and Design Committee of the European Construction Technology Platform. This Committee is exploring traditional and new areas for the future housing for older people in Europe. The H4L Vision will be one of the drivers to guide the medium-long term strategy of the ECTP AAD Position Paper. This will be mainly carried out by ECTP, UNIVPM, TecNALIA, TNO and UU that are involved in the Committee and will be translated into important policy actions, as the Committee will be in contact with the European Commission and the EU Member States to disseminate and implement the outcomes of the Position Paper. Similar actions will be taken by the single partners/members with respect to their local Authorities (some of them, e.g. the Marche Region in Italy, have already signed the Letter of Commitment).

The second broad action will be directed toward using the Vision as a strategy driver in several research & innovation projects where the H4L partners are involved. One

important immediate exploitation, for example, will be in the framework of the EU-JP DTH-04 Project e-Vita (European-Japanese Virtual Coach for Smart Ageing) launched in January 2021, where UNIVPM and AGE are partners. In this project, the housing characteristics and future perspectives will be taken into account to define elements and configuration of the virtual coach in the living environment. Therefore, the Vision Document will be used to provide indications on how the virtual coach should fit in the future “optimal” age friendly environments. This is particularly important also with respect to the standardisation among EU and Japan, where cross-fertilization actions can be implemented.

Finally, the third action will be directed to guide the business market development (with related opportunities for the partners). This will be done by sharing the Vision document with the stakeholders in the construction and housing industries, which will be supported by the Vision in understanding the suitability of the H4L CS in promoting the future market of age friendly environment.

4 ER02 - H4L Taxonomy and KPI definition methodology

4.1 Description of the result

The working taxonomy of age-friendly homes (D2.4) presents a structured and detailed breakdown of what it means for a home to be age-friendly. It aims to fill an evident gap in current understanding of and discussions around age-friendly homes: the lack of basic shared descriptive language for academic and practical discourse. This lack of a common reference framework hinders efforts to improve the age-friendliness of the European housing stock: without a usable framework it is very hard to identify which problems to tackle, which intervention strategies are likely to work, and/or how to incentivize improvements appropriately. Specifically, the taxonomy has been developed around the following goals:

- Create a common language, focusing on the universalities rather than the context-specific particularities of age-friendly homes.
- Clarify who are the stakeholders involved in age-friendly homes and help identify their needs and concerns.
- Help stakeholders understand and appreciate each other's viewpoints and find a common ground.
- Give a complete view of all the functions the home environment needs to fulfil for the various end-users, taking especial care to move beyond the relatively narrow domain
- Support the adoption of a positive, value-based approach to ageing in place
- Present a comprehensive overview, yet be flexible enough to allow description, analysis and assessment in specific contexts and projects.

The KPI-framework uses the taxonomy as a basis and represents the follow-on step in the transition from vision-based, high-level concepts to a comprehensive, “universal” (that is, not implementation context dependent) set of indicators, that has formed the

basis for more specific requirement-setting and verification in the Homes4Life Certification Scheme.

The Homes4Life KPIs are best understood as Functional Performance Indicators (FPIs) and describe what a home, its components, its physical characteristics, its lay-out and design its location and settings, its connections to the outside world, and/or its financial and governance aspects need to be able to do in order to contribute to the creation or maintenance of an age-friendly environment that is enabling, fit for purpose, flexible and resilient. The KPIs or FPIs in Homes4Life are defined in terms of outcomes achieved and functionality provided for users and other stakeholders. This has been done in accordance with the objective of providing a framework that is relatively context-independent, with it or sections of it being tailored to more specific applications through requirement and verification process and value setting in specific certification application.

4.2 Ownership

The work to develop the taxonomy and KPI-framework has been led by TNO but represents a joint effort of the Homes4Life consortium partners. The taxonomy and KPI-framework as they stand at project end are Public deliverables of the Homes4Life project and can be accessed through the project website.

4.3 Exploitation pathway

Exploitation of the Homes4Life taxonomy and KPI-framework is primarily foreseen in the domains of research and policy.

In the research arena, the Homes4Life tools can have value as carrier instruments and structuring principles for organization, interpretation and presentation of research and innovation in integrated urban and rural development. As such, the taxonomy and KPI-framework will be used as input to shape and advance the research agenda of the ECTP's Active Ageing & Design committee. The taxonomy and KPI-framework may also find use as mapping and correlating tools for e.g. case study data collection and analysis. The taxonomy and KPI-framework may benefit from the opportunities for validation and adjustment of structure and contents afforded by this type of research-based utilization.

Through presentation of the taxonomy and KPI-framework at the City and Complexity online conference in June 2020, an initial scoping exploration was done of the potential for deployment (again as a mapping and correlating framework) in complexity-theory driven research centring on the man-made physical environment. Opportunities exist but will require further development of both tools.

Research in the field of salutogenesis¹ is moving towards an incorporation of the home and the physical and social living environment as an important co-determinant in creating the Sense of Coherence that is a prerequisite for positive health-based approaches to ageing well and social participation. The structured understanding of

¹ Salutogenesis is a medical approach focusing on factors that support human health and well-being, rather than on factors that cause disease (pathogenesis)

these domains of daily life offered by the taxonomy and KPI-framework may contribute to research efforts to further explore this novel area of application of *salutogenesis*-based concepts.

In the field of policy and practice, exploitation of the Homes4Life tools is foreseen as a structured basis to conduct and engage in multi-stakeholder dialogue. Intrinsic to the principles that have guided the development of these project deliverables, is their use as a mapping and benchmarking tool to understand and predict the essential elements of innovative practices in different countries and socioeconomic settings as well as to predict the possible effect of policy decisions and interventions. The tools' functionality in analysing and comparing actual projects and pilots has the potential to aid transferability of innovative practices, creating value through improved potential for upscaling and successful cross-cultural deployment. A clear need in policy development and implementation that the taxonomy and KPI-framework can help answer is that for a broadly accepted and structured collection basis for evidence of socio-economic return on investment. It is expected that the Homes4Life tools can also facilitate the engagement of non-professionals in housing and neighbourhood development schemes, as well as the elicitation and understanding of end-user views, priorities and values.

5 ER03 - H4L Certification Scheme

5.1 Description of the result

Homes4Life is a European certification scheme based on an inspirational and realistic vision of people's needs and requirements based on a life-course approach. The certification scheme builds both on the potential of well-designed construction and digital solutions, for more resilient dwellings.

The certification scheme is underpinned by a comprehensive evaluation framework designed around 6 strategic clusters. The 6 clusters cover an in-depth and holistic analysis of what a home and its components need to fulfil to create and maintain an age-friendly environment that is enabling, fit for purpose, flexible and resilient.

The Certification Scheme can be applied for housing at various lifecycle stages i.e. in the Design stage, in the Construction phase, and even at In-use phases (i.e. already inhabited).

5.2 Ownership and post-project exploitation intentions

Is there one clear "owner" of the innovation or multiple owners?

The work leading up to the Homes4Life certification scheme has been a joint effort to which all Homes4Life project partners have contributed, in particular the work around the working Taxonomy and KPI framework (ER02) which underpins the certification scheme.

The extent to which Homes4Life partners who have declared an interest in being involved in a further post-project exploitation of the certification scheme, largely

depends on organisation type (profit/ non-profit), their realm of activity and potential constraints in terms of human resources. At the time of writing this report, the post-project exploitation strategy of the individual Homes4Life partners can be summarized as follows:

TABLE 2 – POST-PROJECT EXPLOITATION STRATEGY

Post-project Exploitation role	Activities corresponding to this role	Partners who have declared their interest
1. Management of the Homes4Life certification	<ul style="list-style-type: none"> • Make sure the evaluation framework is regularly updated (potentially by liaising with external experts) • Set up training courses for referents and auditors • Establish and maintain the basic guidelines for implementing the H4L certification • Conduct market watch, monitor potential inappropriate use of the H4L brand • Accredit certification bodies interested to market / sell the H4L certification • Manage the network of stakeholders (marketers and sellers, trainers, auditors, certifiers, end users, etc.) and the (management committee) 	<ul style="list-style-type: none"> • Certivéa • CSTB (<i>parent company of Certivéa</i>)
2. "Marketing / Sales" of the Homes4Life certification	<ul style="list-style-type: none"> • Ensure business development, marketing and promotion of the certification • Sell the certification on a given geographical area and/or typology of buildings • Quality control & audit of the assessments implemented by the assessors (row 4) 	<ul style="list-style-type: none"> • CERWAY (<i>Certivéa Subsidiary company</i>) • Tecnalia Certification (<i>TECNALIA Subsidiary company</i>)
3. Homes4Life Auditors Training	<ul style="list-style-type: none"> • Develop and implement training sessions for future Homes4Life auditors 	<ul style="list-style-type: none"> • R2M (specific interest in France,

		Spain, Italy and the U.K. where it has branches) <ul style="list-style-type: none"> • UNIVPM (Italian market) • CSTB • Tecnalia Certification (TECNALIA Subsidiary company)
4. Homes4Life Assessments	<ul style="list-style-type: none"> • Trained / certified consultants that will implement the on-site certification (assessors) 	<ul style="list-style-type: none"> • R2M (specific interest in France, Spain, Italy and the U.K. where it has branches) • UNIVPM (Italian market) • CSTB

There are contractual relations foreseen between the organisations which will undertake the different roles in the post-project exploitation. In particular:

- The partners who market and sell the certification scheme will pay **royalties** to the Managing Entity (in exchange for ensuring a continuously updated and thus relevant certification scheme as well as market watch services, etc.)
- **Service contracts** will be established between on the one hand the entities performing training and assessments, and on the other hand the ones ensuring marketing & sales.

With regards to the **Management** of the certification scheme, this is a key activity, and will involve an up-front cost / risk concerning the initial investment to build up the required CS management processes (mainly in the form of human resources), before generating revenues and profit. It is expected that there will be the need to create a specific association in case more than one partner is interested.

It could be either a new Homes4Life association dedicated to managing the Certification Scheme, or another option is to partner with an existing association which might be interested.

This structure will set up and lead/moderate an “**Advisory Committee**” for the Homes4Life certification scheme. This committee will have to manage the certification with all interested parties (updates of the scheme and the rules, approval of the certification bodies, etc.). Most partners of the Homes4Life consortium have already formally declared their interest to be a member of this committee. A large call will be launched to the community of interest that was formed during the project to set up this committee and to decide on how it will be organized. For example, there could be colleges bringing together all the parties such as: a college of users (builders, developers, property owners and managers, etc.), a college of institutions and third parties (local authorities, research organisations, associations for older people, etc.) and a college of service providers (certifiers, auditors, trainers).

The above concepts are summarized in Figure 1.

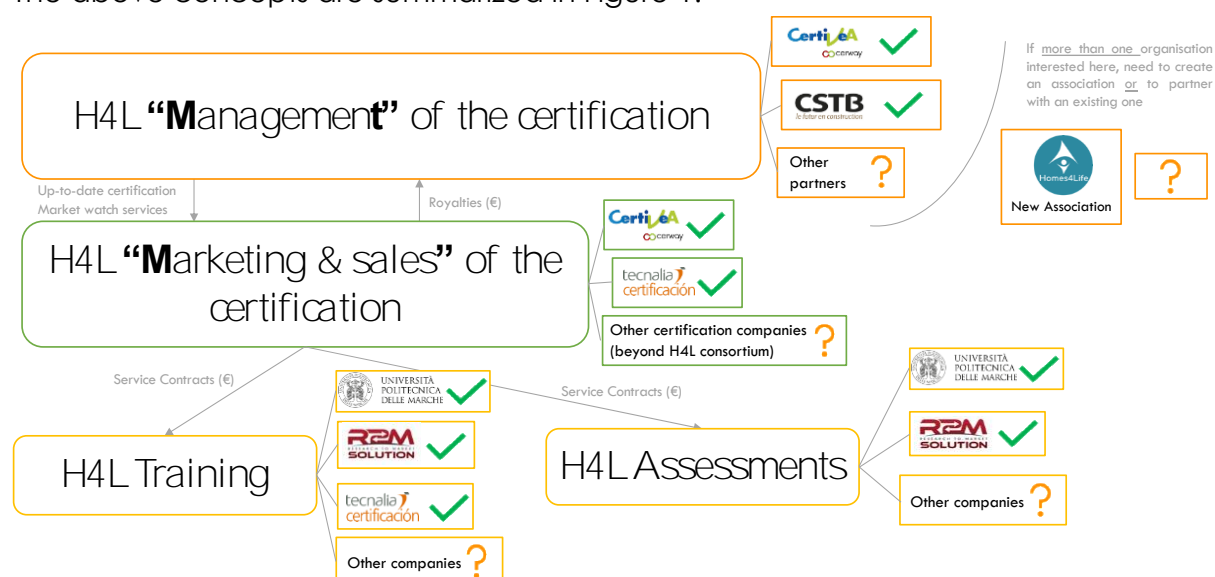


FIGURE 1 – ORGANISATIONAL MODEL FOR THE POST-PROJECT EXPLOITATION OF H4L CS

This chapter presents the situation at the time of writing this report, and obviously the situation is dynamic. In addition, it is reminded the following statement from the Homes4Life Grant Agreement:

“It is important to note that the intended exploitation of Homes4Life results and scheme by Homes4Life partners will in no way limit the right of exploitation of the project results (including the scheme) by other partners. To the contrary, the aim is to very quickly demonstrate the impact of the Homes4Life CSA through these early-implementers, and therefore pave the way to further wide-spread adoption across Europe.”

Hence at some point, external partners might also be associated with the above exploitation model, for instance to market the certification on additional countries in which Homes4Life partners have a lower presence & impact.



5.3 Key resources and background declaration

The key background which has been used during the Homes4Life project is the ISIA (Innovative Sustainable Interactive Application) digital platform which belongs to Certivéa. ISIA is the digital platform being used by Certivéa & Cerway (its subsidiary) to implement, market and to handle customers relationships for its current portfolio of certifications. As mentioned in the Homes4Life Consortium Agreement, the source code of the platform is excluded from access rights, hence it remains the property of Certivéa.

According to the Grant Agreement, the Homes4Life certification is a public result so, if another entity than CERWAY is interested in marketing the Homes4Life certification scheme, then this entity is free to implement it on another platform and to handle customers in a different way. An agreement to share the use of the ISIA platform might also be something that could be envisaged on a case-by-case basis: for instance, TECNALIA Certification could be interested to focus its efforts on marketing the certification in Spain, and to discuss fair conditions and a potential agreement with CERTIVÉA / CERWAY to share their ISIA platform with TECNALIA's clients.

5.4 Related Intellectual Property Rights

5.4.1 Market competition

Tick all possible protection forms of the entire/parts of the ER that you might want to explore.

	<i>Patent</i>
	<i>Industrial design rights</i>
	<i>Copyright</i>
X	<i>Trademark (EU collective certification mark)</i>
	<i>Trade secret</i>
	<i>Database rights</i>
X	<i>Other (specify): Creative Commons License</i>

5.4.2 Protection strategy details

Concerning the Homes4Life Certification scheme itself, as indicated earlier, it is a public deliverable hence accessible to anyone, to the main intention being to allow for a wide-spread implementation and exploitation throughout Europe.

Even though this result is public, the Consortium intends to explore the possibility to grant it a Creative Commons License (see <https://creativecommons.org/licenses>).

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At the time of writing this report and based on discussion with project partners, it was agreed to choose the most open Attribution license for both the Vision (ER01) and the Taxonomy / KPIs framework (ER02). While for the Certification Scheme (ER03), a more restrictive license will be chosen (analysis ongoing by CER at the time of writing this report, in conjunction with refinement of the management structure).

Concerning the Homes4Life brand / mark, the consortium investigates the possibility to apply for an **EU collective Certification Mark**.

The EU collective mark indicates the commercial origin of certain goods and services by informing the consumer that the producer of the goods or the service provider belongs to a certain association and that it has the right to use the mark.

EU collective marks can be used to build consumer confidence in the products or services offered under the collective mark. They are often used to identify products or services of producers that have similar interests

The full process is detailed at:

<https://euipo.europa.eu/ohimportal/en/certification-and-collective-marks>

At the time of writing this report, CER and TEC are still having discussion with external IPR experts on this matter. It appears that several similar names have already been registered and might create a conflict. If the decision is taken to go forward, **Regulations of Use** of the EU certification mark will have to be submitted within 2 months

after the registration. The regulations of use constitute the essence of the certification mark. These must be filed within two months of the application and need to contain, in particular:

- the characteristics of the goods or services to be certified;
- the conditions governing the use of the certification mark;
- the testing and supervision measures to be applied by the certification mark owner.

It is highly probable that external IPR expert support will also be used to properly write these Regulations of Use.

5.4.3 Required funding for protection

There are no costs associated with the Creative Commons License (Creative Commons is a non-profit organisation).

Concerning the EU certification mark, the basic application fees are EUR 1 800, or EUR 1 500 if applied for online.

Further information at <https://euipo.europa.eu/ohimportal/en/fees-and-payments>

5.5 Exploration of value creation potential

The potential for value creation of the Homes4Life Certification Scheme has been explored using the Value Proposition Canvas methodology (VPC). The VPC is a methodology related but not identical to the Business Model Canvas. The VPC focuses specifically on the potential value (hence the name) a new product or service can deliver to its prospective client base. Its use is most often anterior to that of the BMC and can help to make the deployment of the latter more effective, by ensuring that the considerable effort needed for a full BMC is expended only on high-potential opportunities.

The VPC consists of two main sections: the customer profile and the company's value proposition.

The customer profile inventories a prospective client's Pains, Gains and Customer Jobs.

- Pains list the negative experiences, emotions and risks that the client experiences in carrying out their core activities
- Gains list the benefits and value the client expects or hopes to get from being successful in carrying out their core activities
- Customer jobs provide a breakdown of what these core activities entail

The Value Map section of the VPC inventories

- Gain creators. How the product or service creates customer gains and how it adds value for the customer
- Pain relievers. A description how the product or service alleviates client pains

- Products and services. A description of which products and services are required to provide the pain relief and gains creation.

A visual representation of the VPC is included below

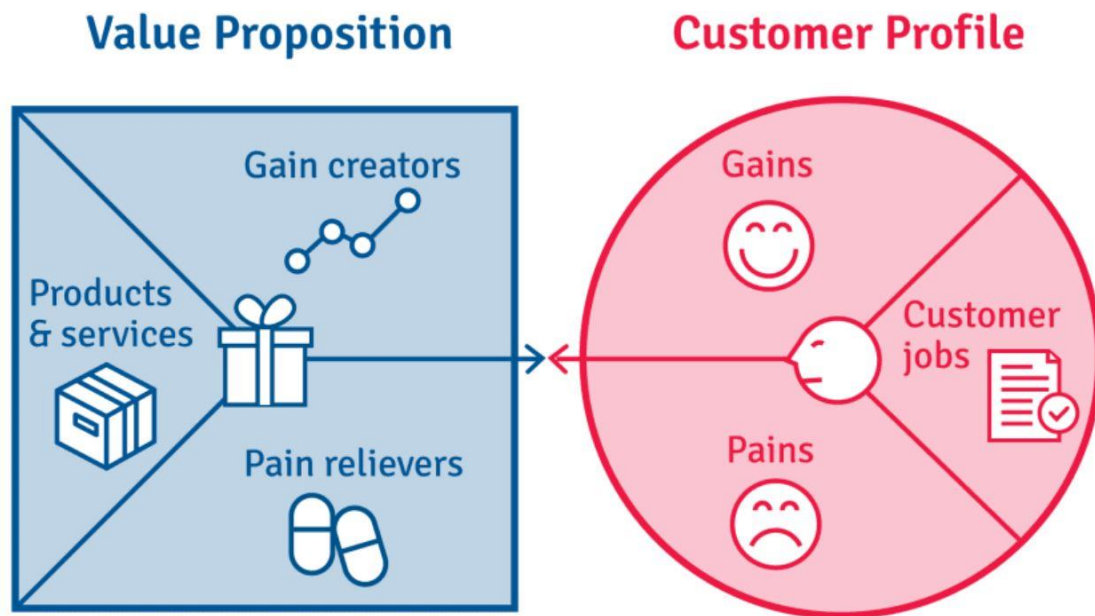


FIGURE 2 – VALUE PROPOSITION CANVAS

A separate value proposition analysis should be done for each major client group or segment in scope. Accordingly, an initial attempt at a VPC analysis is provided below for three main customer groups identified for the Homes4Life certification scheme: public sector organisations (public authorities/public housing providers); private sector developers; and grass-roots initiatives for communal housing projects. In developing the exploitation strategy, the assumptions made in this analysis should be checked and refined through consultation with client group representatives (through the Col, and through pilot sites for certification testing).

5.5.1 Public sector client segment

Public Sector	
Pain relievers <ul style="list-style-type: none"> • Advance scoping of stock to allow fast-tracking of adaptations • Common assessment platform and assessment vocabulary for collaboration by decision makers • Approximate budgeting of improvement schemes and advance assessment of quality 	Pains <ul style="list-style-type: none"> • Growing number of vulnerable citizens requiring support in the home environment and in care environments • Limited funds for support • Staffing shortages in health and social care • Limited ability and willingness to pay on the part of citizens

<p>impacts of measures in different budget classes</p> <ul style="list-style-type: none"> Clarification of financial and non-financial benefits for residents and for the public sector Prediction of effects of investment in neighbourhood quality and livability Insight into opportunities and strategies to combine investments in different policy domains Comprehensive quality and performance framework detailing required performance levels for different population groups and individuals 	<ul style="list-style-type: none"> Growing inequalities between citizens and between living areas; fragmentation of social cohesion Unpredictability of demand: no clear ideas on timings and volumes No clear ideas on required quality and functionality Needs and pressures in competing domains Fragmentation of decision making authority
<p>Gain creators</p> <ul style="list-style-type: none"> Costs / benefits analyses on the basis of certification scheme to calculate scenarios for investment in home improvement Quick-scan portfolio status for long-term (financial) planning and identification of short-term investment priorities Dashboards to provide decision makers with "at a glance" information. Monitoring and assurance of housing quality on the basis of a quality framework with broad stakeholder buy-in. 	<p>Gains</p> <ul style="list-style-type: none"> Sustainability of public sector budgets Reduced demands on health and social care Ability to plan effectively for future demand Ability to replicate and upscale successful solutions Reduction of housing precariousness stats More effective utilization of investment and maintenance budgets. Realistic basis for determination of budgets required Economic value creation in neighbourhoods and districts with improved fitness for purpose Increased tax base Public support and electoral success
<p>Products and services</p> <ul style="list-style-type: none"> Periodic portfolio scans What if scenarios for investment options. Costing of upgrades to higher CS class Basic certification services in development and operations Decision-making dashboard with certification scheme as underlying data engine 	<p>Customer jobs</p> <ul style="list-style-type: none"> Social, housing and health policy development and implementation Allocation and prioritization of budgets Allocation of housing and home adaptations Portfolio monitoring and scheduling of investment/renovation/upgrading Initiate and procure for new builds, renovation schemes and acquisitions Assessment of home support needs and allocation of services and facilities Urban planning and development

5.5.2 Private sector client segment

Private developers	
<p>Pain relievers</p> <ul style="list-style-type: none"> Clear, common, agreed reference standards for procurement <ul style="list-style-type: none"> Land purchase by developers 	<p>Pains</p> <ul style="list-style-type: none"> High failure rate and failure costs in project developments Low success rate and high expenditure of

<ul style="list-style-type: none"> ○ Bidding for government/public sector/health and care sector contracts ● Agreed and unequivocal standards adherence assessment during project development and at delivery ● Approximate budgeting of improvement schemes and advance assessment of quality and market viability impacts of measures in different budget classes ● Realistic performance standards for initial developments. Agreed basis to assess and cost future development flexibility ● Insight into occupant priorities and preferences to tailor projects for broader market appeal 	<p>money, effort and time in procurement processes</p> <ul style="list-style-type: none"> ● Lack of cooperation from public and private sector land-owners ● Planning permission barriers and limitations ● Unfavourable risk/revenue ratio in projects ● "Inflated" performance requirements lead to high cost base per dwelling, not easily recouped from sales value or rental revenues ● Limited market appeal: properties need to be developed for "niche" market
<p>Gain creators</p> <ul style="list-style-type: none"> ● Costs / benefits analysis on the basis of certification scheme for better prior assessment of business case for major developments ● Costs / benefits analyses on the basis of certification scheme to calculate scenarios for investment in home improvement ● Quick-scan portfolio status for long-term (financial) planning and identification of short-term investment priorities ● Dashboards to provide corporate decision makers with "at a glance" information. ● Performance standard "templates" as a basis for development of projects through "mass customization" methodologies 	<p>Gains</p> <ul style="list-style-type: none"> ● Ability to plan effectively for future demand ● Ability to replicate and upscale successful solutions: reduce failure risks and "per project" development costs ● Realistic basis for development budgets, procurement bids etc ● Competitive advantage in procurements ● Improved currency of properties to reduce exploitation risks ● Broadening of activity base: joint ventures with health and social care providers and commercial service providers ● Better understanding of occupant priorities and preferences as a basis for improved market appeal of projects ● Commercial viability of redevelopment and improvement schemes
<p>Products and services</p> <ul style="list-style-type: none"> ● "Procurement packages": made to order performance requirement sets for inclusion in tendering information. <ul style="list-style-type: none"> ○ Methods and services for evaluation of bids ○ Methods and services for in-development and at delivery compliance evaluation ● Periodic portfolio scans ● What if scenarios for investment options. ● Costs/benefits of upgrades to higher CS class ● Basic certification services in development and operations ● Decision-making dashboard with certification scheme as underlying data engine 	<p>Customer jobs</p> <ul style="list-style-type: none"> ● Market and opportunity scanning ● Project development and implementation ● Allocation and prioritization of investment and development budgets ● Portfolio monitoring and scheduling of investment/renovation/upgrading ● Initiate and procure for new builds, renovation schemes and acquisitions

5.5.3 Grass-roots initiatives client segment

Grass-roots initiatives for communal housing projects	
Pain relievers <ul style="list-style-type: none"> Performance standards with life course flexibility to preassess suitability of communal housing for future health and care provision needs Factual basis for establishing market potential of facilities Factual basis for demonstration of social and community value of proposed projects Tools to translate prospective occupant needs, priorities, preferences into functional briefs, and to facilitate dialogue with and monitoring of developers during project development Equivalency tools to match H4L certification requirements to standards and guidelines 	Pains <ul style="list-style-type: none"> Problems in accessing project development funding Unavailability and/or unaffordability of sites for project development Skepticism and lack of buy-in from public authorities Health and care service providers unwilling to provide services in communal housing developments Complex legislative frameworks difficult to handle for citizen-driven initiatives Standards and guidelines not equipped to handle communal housing settings Lack of knowledge on appropriate functional and technical performance standards
Gain creators <ul style="list-style-type: none"> Performance standard setting tools and instruments functioning on user-centric basis. Customization tools to allow tailoring of individual dwellings within overall project parameters Costs / benefits analyses on the basis of certification scheme to calculate scenarios for investment in home improvement; also to engage in effective dialogue with (public sector) stakeholders Standards and tools providing comfort to public authorities and (health) service providers on safety and fitness for purpose Monitoring and assurance of housing quality on the basis of a quality framework with broad stakeholder buy-in. 	Gains <ul style="list-style-type: none"> Self-determination: occupants design and manage their own later-life living environments Conducive settings for peer-to-peer support and building of new social networks Opportunity to create "nodal points" for development/revitalization of neighbourhood/village level facilities and services Homes that support ageing in place up to and including end-of-life care
Products and services <ul style="list-style-type: none"> What if scenarios for investment options Simple-to-use tools for cooperative development of functional briefs/development options Customization tools "Functional brief" generating tools to facilitate communication with developers Basic certification services in development and operations Neighbourhood development dashboards with certification scheme as underlying data engine 	Customer jobs <ul style="list-style-type: none"> Set up cooperatives and attract participants Acquire sites and commission project developments Negotiate with public authorities, land owners, health and social care provers Setting up of functional briefs and management of project development Secure funding arrangements Day-to-day management of cooperative sites

5.6 Strategy for supporting investment

5.6.1 Preliminary roadmap & milestones of activity

Specify which (commercialisation) actions for the ER exploitation you want to take in the first 2 years after project closing (ex. which development/marketing/sales actions such as the production of a particular packaging/communication material/advertisement campaign, organisation of promotion events, training of resellers etc.).

First year of operation should be dedicated to promotion

- Build-up all marketing and commercial documentation
- around specialized events and conferences
- among the network of existing contacts and pilot projects

5.6.2 Commitments to invest

Homes4Life **Deliverable D4.6** provides a list of the organisations that have accepted to sign a MoU / Commitment to support and/or invest with Homes4Life at the time of writing this report. These organisations will obviously be prioritised to kick-start the post-project exploitation of the Homes4Life CS.

5.6.3 Business cases (case study analysis)

Several 'Business case' fiches have been developed based on each H4L pilot study run in WP4. These are available for download on the Homes4Life website. They are an important dissemination and exploitation tool to illustrate the H4L CS through tangible examples. These fiches are provided in the appendix of this report.



FIGURE 3 – EXAMPLE OF A BUSINESS CASE FOR ONE PILOT SITE

5.6.4 Certification promotional package

A Homes4Life Certification Scheme Promotional Package has already been developed to support the post-project exploitation of the CS. The package includes:

- a certification promotional brochure
- a customisable certification poster for multi-family certified buildings
- a customisable certification metal plaque
- a customisable award certificate

The overall layout of the above elements is aligned with the already existing Homes4Life material which includes its project logo, project website, short promotional video and the Vision Document.



Brochure

Poster

Pilot award

Metal plaque

FIGURE 4 – H4L PROMOTIONAL TOOLS

Further details are provided in the dedicated Homes4Life Deliverables D4.5 (Promotional Package) and D5.5 (Promotional videos).

6 Individual exploitation plans

Each Homes4Life partner has its own individual exploitation path of the projects results, which relates to its own internal strategic activities and roadmap, as briefly summarized in the table below.

TABLE 3 – EXPLOITATION PLANS FOR EACH HOMES4LIFE PROJECT PARTNER

Partner	Individual Exploitation Plan	Related ERs
Research & Technological Organisations		
TECNALIA	<p>Tecnalia is interested in the commercialization of H4L CS and training to potential assessors.</p> <p>Tecnalia is interested in the exploitation of taxonomy and KPIs developed in the frame of H4L project for future research projects and for innovative projects directed to specific markets.</p>	ER02 ER03
TNO	TNO is interested in use and further development of H4L Vision and Taxonomy/KPI-framework in the context of programme research, competitive funding research and contract research, as well as for work in policy development and implementation support.	ER01 ER02
Universities		
UNIVPM	<p>UNIVPM is interested in the commercialization of H4L CS in Italy, selling certification procedure to potential clients or training to potential assessors.</p> <p>UNIVPM is interested in the exploitation of taxonomy and KPIs developed in the frame of H4L project for future research projects.</p> <p>UNIVPM will contribute to exploit the Vision in dedicated actions to increase awareness</p>	ER01, ER02 and ER03

	about age-friendly environments for funded research and business opportunities.	
UU	<p>UU's core activities are publications and teaching.</p> <p>UU is interested in developing further the innovation pathways framework for scaling-up strategies in the AFH domain.</p>	
Industrial organisations		
Certivéa	<p>Certivéa is convinced that there will be a growing demand for certification in the AFE field and that H4L approach is innovative. Indeed, the recent health situation in Europe showed the need to change the approach for ageing and housing, and H4L can enable stakeholders to demonstrate that they are on the "right track".</p> <p>This is why Certivéa is campaigning for the involvement of its parent company, CSTB, in the management of H4L CS and training programs, but also of its subsidiary Cerway in its commercialization (marketing and selling). Otherwise, Certivéa will be directly involved in these fields.</p> <p>Because of its long experience in the field of certification, Certivéa can also provide valuable assistance in advising on the management of the stakeholders' network (marketing, selling, training, assessment) and on the commissioning of certification bodies.</p>	ER01, ER02 and ER03
R2M	<p>R2M already offers Building Certification Consultancy: it has the expertise and accreditation to guide projects through BREEAM, LEED and WELL certification processes.</p> <p>R2M believes in the Homes4Life CS market potential and is therefore interested to organize & conduct Homes4Life CS Trainings, in order to train future H4L assessors, in particular in the</p>	ER03

	<p>countries where its branches are present (Italy, France, Spain and the U.K.).</p> <p>R2M is also interested in having some of its own staff members in becoming certified assessors to implement on-site H4L certifications (again with a primary focus on IT, FR, SP and the U.K.).</p> <p>R2M could also contribute to some of the CS 'management' activities such as market watch and competitor analysis (these are activities that our company often delivers through consultancy activities).</p>	
Associations		
ECTP	<p>All the Homes4Life results as well as the Certification Scheme will be presented and promoted among ECTP Members during ECTP internal events (Plenaries, Steering Committee meetings), and among an even larger network of stakeholders during the ECTP Conference 2021 (1st quarter 2021).</p> <p>This promotion will be made in particular via the "Active Ageing and Design Committee", one of ECTP's working group dedicated to the integration of societal and age-friendly related issues in the construction sector and in the design of the future built environment. Elements issuing from Homes4Life results will be included in the future Strategy of the Active Ageing and Design Committee.</p> <p>ECTP is the developer (with WGBC) of the "Built4People" (B4P) Partnership, which is a co-programmed Partnership between the European Commission and the industry. At the end of the Homes4Life project, an evaluation will be made in order to assess how its results can influence the partnership, e.g. by orienting future calls within B4P.</p> <p>ECTP, via its Active Ageing & Design Committee, is interested in participating in the</p>	ER03

	exploitation of the Homes4Life Certification Scheme. This could be done e.g. by being integrated into an advisory board, supporting the management team.	
AGE	AGE Platform Europe encourages the WHO approach of age-friendly environments, where housing composes one of the domains influencing active and healthy ageing. Being a non-for-profit organisation, AGE will not take part in the commercial exploitation of the Certification Scheme; however, the results and knowledge of the project are crucial to continue advocating the importance of age-friendly housing towards EU institutions and organisations working on active and healthy ageing.	ER01, ER02
EUROCARERS	<p>Eurocarers via its network of members can further promote the public results and tools developed by the Homes4Life project, in particular how the certification scheme can be used as a tool of what needs to be in place for “ageing in place”</p> <p>As an example, the H4L taxonomy and KPI framework for instance clearly demonstrates that ageing in place requires continued investments in community-based health and social services that empower individuals to continue to live independently in their own homes or to access affordable age-friendly housing.</p> <p>Eurocarers will be able to use these H4L project outcomes as a basis for our wider discussions with policy makers at EU level in the context of activities in the field of the sustainability of long-term care (LTC), the balance of formal and informal care and in the context of wider EU initiatives such as the European Pillar of Social</p>	ER02

	Rights and the upcoming Green Paper on Ageing.	
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7 Conclusions

This report presented the Homes4Life Exploitation and Supporting Investment Strategy. At the time of writing this report, the situation is still very dynamic, and the positioning of each partner could be adjusted depending on the discussion and on the work which are ongoing to implement this exploitation strategy.

Two main contact points, at Certivéa / Cerway and at TECNALIA Certification, have been made clearly visible both on the CS Brochure and on the 2nd H4L promotional video. They will be able to answer questions from external stakeholders once the project is formally completed and will redirect the questions to the other partners when relevant.