Funding Models for Silver Economy Housing:

Financial innovation for age-friendly housing and agetech adoption

Report 2B – France

Authors: Dr Martin Clark and Dr Lorraine Morley, Allia Ltd

December 2020

NOT FOR EXTERNAL PUBLICATION WITHOUT PERMISSION

This project has received funding from the Interreg 2 Seas programme 2014-2020 co-funded by the European Regional Development Fund under subsidy contract No 2S02-022.

Table of contents

Acknowledgements

We are grateful to Joseph Pucek for assistance as the French partner on this part of the SEAS2Grow project.

1. Introduction

Our first report on this topic, *Report on Funding Models for Silver Economy Housing* (Dec 2019)[1], set out the background on the case for and costs of age-friendly housing design and incorporation of agetech products. We made some broad suggestions of innovative financial models and mechanisms that could help to increase the scale of adoption, with the core principle being that cost-effective expenditure in this area will both save money in reduced health and social care costs by preventing later problems, but also enable people to live longer, healthier and happier lives at home rather than going into care or hospital.

It was stated that the additional costs of basic age-friendly design improvements at the point of construction (level access, wider doorways etc) can cost as little as £/€2000 extra on a house or apartment[2]; and a useful package of agetech products could be installed or retrofitted for up to £/€5000[3]. In terms of a typical house or flat of say £/€250,000[4] this might add £/€6k or 2.4% to the cost.

The final reports are 4 short documents, one per partner country, looking at what financial innovations might enable these costs to be funded on the basis that they would be an investment worth enabling, and seeking the path of least resistance towards achieving this.

We are now writing in the COVID-19 period and expect the financial landscape to change significantly as the recovery happens. If finding ways to creatively finance better age-friendly housing and technology was becoming increasingly urgent before the crisis, it will be even more so afterwards. National governments, local authorities and housing providers are all now more sensitised to the need to provide households with smarter services to enable them to cope with threats to their health and wellbeing. This also creates **opportunities** for the providers of relevant products and services, and for those who invest in them, so the benefit is both social and economic.

Awareness of the need and opportunity may be greater, but availability of funding may be reduced. This makes it all the more important that the value for money and cost benefit case of products and services is made more strongly, and ideally that they rely less on state funding. We look at ways of developing independent funding solutions or other self-funded mechanisms as progress may otherwise be delayed.

It is important to note that this report is not specifying a particular set of design features for new build or retrofit packages, or of any particular agetech products. It is assumed that the **cost-benefit case** can be made by focussing on those that provide the best value for money for each setting and for particular groups of older people according to their needs. We are dealing solely with the challenge of how in principle the cost of such design, adaptation or packages can be incorporated into the financial model of different phases of the construction and operation of housing that improves healthy independent living.

---

[1] Available on SEAS2Grow website www.seas2grow.com
[2] Lifetime Homes website – 'costs' http://www.lifetimehomes.org.uk/pages/costs.html
[3] Based on Smart Homes NL experience
[4] FR regional average prices include €198,000 in Lille to €323,700 (Greater Paris) – Notaires de France, June 2020

Some of the ‘costs of failure’ here are high and were discussed in the previous report. But with hip and femur fractures costing health systems around £30,000 it is self-evident that interventions that might reduce them by even 10% would be worth spending up to £3,000 to achieve.

Smart caring home products that are beginning to address such issues in an integrated manner are now widely available (see appendix) as well as a range of other complementary agetech products for more specific conditions (see previous report).

The challenge is how to improve awareness and robustness of the case, and then how to fund wider adoption.

Our earlier report identified a set of initial plausible financial innovations classified into 3 broad categories:

1. Mechanisms to unlock additional funding sources
2. Tax reliefs or other policy levers
3. Business model innovations.

They were also broken down by whether they are targeted at the developer or provider of the housing (both public and private); the consumer or their family; or another actor such as a local authority or home improvement agency.

Each country in the project was asked to consider the example financial mechanisms and these questions:

1. Which of the possible models on the list is relevant to your country, and why?
2. What financial innovations for age-friendly housing and technology are you already aware of? Is there anything similar to those items on the list already happening?
3. What financial innovations in other sectors could be applied to agetech?
4. Which single financial innovation would be the best one to propose for your country?
5. Do you have any expert contacts who might help?

The responses are outlined in the following section.

2. French national/regional challenges, policies and opportunities

a. Policy background

Since the 2000s, France has taken the challenge of bringing its housing up to standard so that people can age at home. Until then, public policies and action plans relating to old age had focused primarily on health and medico-social issues.

The 2000s marked by major laws

The beginning of the 2000s was marked by a major law on old-age policies, the law of 20 July 2001, which introduced a new social benefit specifically for dependent elderly people. The Personalized Autonomy Allowance or APA is created.

Another major factor was the heatwave of summer 2003 which generated a shock wave of guilt at the situation of isolation and exclusion in which many elderly citizens find themselves. The public authorities reacted with the law of June 30, 2004 on solidarity for the autonomy of the elderly and the disabled.

2016 – a paradigm shift for the adaptation of society to ageing

The law of 28 December 2015 on the adaptation of society to ageing, known as the ASV law, is the most recent major act in terms of old age policies.

Above all, it has a very strong ambition to raise national awareness of the imminence and importance of population ageing in France. Far from being a side issue that could be managed independently of other parts of society, ageing is at the heart of societal projects and must be integrated into all public policies.

It also carries a message on old age that is no longer focused solely on loss of autonomy. In this respect, the ASV law constitutes a form of return to the roots of the Laroque report which, in 1962, advocated emphasizing the social integration of the elderly through adapted housing, social and leisure activities, etc. The ASV law is also an important step towards the integration of the elderly into society.

It appears that the "all medical" approach is not a sufficient response to the challenge of ageing, which must be approached in a more global manner: promotion of prevention and social participation - fight against isolation and above all improvement of the habitat.[5]

The law on the ***adaptation of society to ageing*** came into force on 1 January 2016. In a tight budgetary context, 700 million euros per year will be allocated to support the autonomy of the elderly. This text creates new social rights by reforming - and upgrading - the APA (Allocation personnalisée d'autonomie), and by creating a right to respite for caregivers.

It is based on three pillars: anticipation of loss of autonomy, the overall adaptation of society to aging and support for people with loss of autonomy.

The second axis of the law aims to adapt all public policies to ageing in the areas of urban planning, transportation and especially housing. The State is committed to keeping elderly people at home in order to optimize the costs of financing ageing and to break the isolation and loneliness of the elderly. The reform of the APA to allow seniors to live at home for 700,000 beneficiaries. It increases the

[5] https://ouicare.com/fr/bienvieillir/petite-histoire-de-politique-vieillesse/

number of hours of home help; reduces the co-payment (for a person with 1,500 euros per month, the remaining amount to be paid will be reduced from 400 to 250 euros. A saving of 1,800 euros per year); and totally funds beneficiaries of the Solidarity Allowance for the Elderly (minimum old-age pension).

b. Demographic and other challenges

Some of the key demographic challenges are

- By 2040 more than 1 in 4 of the population will be over 65 (25.6% compared with 18.4% in 2015)
- And by 2070, France could have more than one person aged 65 or over for every two people aged 20 to 64
- Policy priority to age at home wherever possible
- People over 60 move less than the rest of the population (10% compared to 32% on average).
- 10% of people aged 80 to 89 have changed housing and 13% have adapted it.
- Nine out of ten people live at home until the age of 85.
- Among seniors aged 75 or over, 8.8% live in institutions.

To maintain a constant percentage of people in institutions by department, gender, age group and degree of loss of autonomy, the number of places in permanent accommodation in institutions for the elderly should increase by 20% by 2030 and by more than 50% by 2050.

This does contradict the primary focus on ageing at home but illustrates the difficulty of achieving a sufficient change in order to reduce demand for institutional housing. This could be a very important area of work for the agetech system.

Focussing just on the Hauts-de-France region, the proportion of seniors in the region is the lowest in provincial France (21% aged 60 or over compared to 24%), mainly due to the shorter life expectancy of the inhabitants. Younger seniors in the Hauts-de-France most often live at home and in large urban centres. Their home support must therefore be provided through the adaptation of their housing, which raises the problem of their solvency. The same applies to institutional recourse. However, the situation of older people in the region with regard to poverty, although less worrying compared to other generations, is more worrying compared to the national average.

It is estimated that by the end of 2020, there will be approximately 800 senior residences. The number of senior residences is constantly increasing. This explosion of the market is essentially visible in the private structures; independent residences will not experience the same growth rate. Senior residences therefore fill a gap in the senior accommodation market by offering a solution between home care and medicalized accommodation for the elderly (EHPAD).[6]

[6] https://www.sopregi.com/etat-des-lieux-et-perspectives-d-evolution-du-marche-des-residences-services-seniors-en-fr-_r_17_a_129.html#:~:text=En%202016%2C%20on%20comptait%20580,de%2075%20ans%5B6%5D. https://www.leparisien.fr/economie/le-boom-des-residences-services-pour-les-seniors-autonomes-25-05-2019-8079510.php

i. The EHPAD (nursing homes)

Residential facilities for dependent elderly people (EHPAD) are public, associative or private medicalized retirement homes for dependent people. Increasingly focused on very high dependency and the management of neurodegenerative diseases such as Alzheimer's disease, these establishments are faced with aging and the worsening level of dependency of their residents.

This results in an average length of stay of less than 2 years.

ii. Autonomous residences

Also known as hostels or residential homes, independent residences are social, non-medical and often dilapidated establishments. The housing offered is not rooms but apartments complemented by more or less spacious common areas. The law gives a new impetus to collective housing for the elderly with the "résidences autonomies" (new name for residential homes). Autonomous residences are medico-social establishments dedicated to autonomous elderly people halfway between the personal home and the Establishment of Residential Facilities for Dependent Elderly People (the Ehpad),

The government has allocated 40 million over three years to rehabilitate certain self-sustaining residences. This amount is in addition to the $10 million already committed in 2014.
In addition, an "autonomy package" will finance non-medical expenses to preserve the autonomy of residents: nutrition, action to develop social ties, exercises to stimulate the memory, etc.
The minimum services (catering, laundry, prevention, etc.) for the independent residences will be set by decree. Here again, 40 million euros are earmarked each year for this package.

iii. Retirement homes for the elderly (residence senior)

Senior residences are a private solution that complements the independent residences, but most often with larger service areas (swimming pool, restaurant, beauty salon, etc.), more comfortable apartments and more staff.[7]

c. Housing and funding assistance

Today only 6% of housing is adapted to the daily lives of people with loss of autonomy, and 450,000 falls occur each year, 62% of them at home. The National Housing Agency (ANAH) estimates that 2 million people over 60 years of age are in need of housing adaptation.

An evaluation in 2013 of the cost of adapting all the housing of households in need found:
- Nearly 2 million homes (out of total 36.6 million) where one or both householders are over 60 require adaptation
- Of these, 1.1 million are eligible for ANAH assistance, of which 830,000 are owner-occupied and 240,000 are rented. (Therefore there are 900,000 homes needing adaptation but which cannot currently be funded.)
- The total amount of work involved in adapting these 2 million houses for all types of households is estimated at €24bn excluding tax, including more than €10bn for owner-occupiers eligible for ANAH aid.

[7] Source: https://www.domitys.fr/esprit-domitys/residence-seniors-residence-autonomie-ehpad-quelles-differences.html

- At the current level of ANAH aid around €5.2bn will be available, so clearly only around half what is needed.

NB The types of adaptations are fairly typical of existing systems and technologies: installation of a walk-in shower, raised toilets, anti-slip steps, anti-slip floor coverings, a light path to reduce falls, automatic roller shutters.

For homeowners:

- ANAH will fund adaptation for older owners on lower incomes at different rates ('very modest' income < €21,630 annual income for a couple living in the provinces; 'modest' < €27,729). Dwellings must be over 15 years old.[8]
- Some private pension funds offer financial and material aid to retired members with needs such as grab bars or non-slip steps, financing of the intervention of a home helper, etc
- State pension ('social action') will support those eligible for Personalized Action Plan (PAP) with identifying the work needed and obtaining quotes
- A 'prevention kit' through pension insurance for those eligible for PAP can cover toilet and seat booster seat, bath or shower seat, non-skid mat, grab bars, stairway handrail, lighting beacon kits. There is also reference to 'the installation of a tele-assistance system as a means of securing one's home'. The amounts available are small, ranging from €100-300.

<u>Disability support funding</u> may be relevant to older people in many cases

PCH (prestation de compensation du handicap) *disability compensation benefit* is allocated by the MDPH (departmental home for the disabled) and paid by the departmental council. The PCH is an aid intended for people who need help in carrying out the acts of daily life due to a disability. The PCH can cover all or part of the disability-related expenses.

PCH can fund five types of assistance:

1. **human assistance**: intervention by a third person, including the family caregiver, to carry out the essential acts of daily life (washing, dressing, feeding, moving around, supervision, etc.) (maximum 6 hours of daily intervention).
2. **technical aids:** equipment designed and adapted to compensate for the handicap – 3,960 Euros maximum over 3 years. Technical aids are defined as 'any technical instrument, equipment or system adapted or specially designed to compensate for an activity limitation encountered by a person because of his or her disability, acquired or leased by the disabled person for his or her personal use'. These are generally from a list of products in common use and at relatively low cost, unless they are specifically authorised by a medical prescription which widens the list slightly.
3. **aids for home and vehicle** fittings and additional transport costs - 10,000 Euros over 10 years;
4. **specific expenses, i.e**. permanent and foreseeable expenses linked to the disability and not eligible for reimbursement under any of the other elements of the PCH (e.g. incontinence protection, subscription to a remote alarm service, etc.)
5. **or exceptional expenses, i.e. occasional expenses** linked to the disability and not eligible for reimbursement under any of the other elements of the PCH - 100 Euros per month for 10 years.

[8] https://www.anah.fr/proprietaires/proprietaires-occupants/les-conditions-de-ressources/

Aid from local and regional authorities

Elderly people and people with disabilities who wish to carry out adaptation work or equip themselves with technical aids can apply for assistance from several organizations.

Some development work can be taken care of as part of:

- **the APA** (personal autonomy allowance) allocated and paid by the departmental council,
- **the PCH** (disability compensation benefit) allocated by the MDPH (departmental home for the disabled) and paid by the departmental council.
- **Loans or aid** issued by the Association for Accessible and Adaptable Housing for All (within the framework of the Pas-de-Calais department).

<u>Financial / fiscal aid:</u>

Tax credit for equipment works

This covers the acquisition of equipment for housing accessibility or adaptation to loss of autonomy.

Eligible expenditure is limited to €5,000 for a single person and €10,000 for a couple subject to joint taxation. This tax advantage for owners and tenants, without income conditions, concerns only the main residence. The work must be carried out by the company providing the equipment. Tax credit corresponding to 25% of the expenses.

- An income tax credit for housing adaptation expenses (annual national cost = 30 million euros).

Loans

The participation of employers in the construction effort (PEEC), more commonly referred to as the "1% housing", is a tax paid by employers in the form of direct investments allowing, in particular, to improve the supply of social and intermediate housing for employees.

The employer has the choice between 3 approaches:

1. in the form of direct investments in favour of the housing of its employees
2. in the form of reduced-rate loans granted to its employees to finance the construction of their principal residence, their spouse or partner in Pacs, their ascendants or descendants
3. in the form of a payment to Action Logement Services (which is the organization that jointly manages the Participation of Employers in the Construction Effort (PEEC), paid by the companies).

They can also be requested from Family Benefit Organisations or Pension Funds.

Social loans from pension funds

Access to this type of loan is restricted to borrowers affiliated to a pension fund partner of the system. The conditions for granting this type of loan are then determined by the organisations: resource limits (rarely), the amount requested, and the repayment period.

E.g.: CNRACL (national pension fund for local authority employees) offers social loans at attractive rates. There are four eligible themes:

- **Housing improvement (main residence)**

- Health care spending
- Burial expenses
- **Exceptional circumstances (purchase of furniture, household equipment, car purchase/repair, credit repurchase, ...)**

Loans from the CAF (Family Allowance Fund)

The family allowance fund (CAF) can grant you a home improvement loan to carry out work (renovation, insulation, improvements, etc.) in your main residence. The main condition is that you must be a beneficiary of a family allowance and reside in France. The loan can be up to 80% of the amount of planned expenditure, up to a limit of €1,067. The loan is repayable over a maximum of 36 monthly instalments, i.e. over 3 years. Each monthly repayment is increased by 1% of its amount for loan interest.

d. Tax benefits for the construction of senior housing

Tax incentives are already used in France to encourage the construction of senior housing. By granting tax benefits to investors in this type of residence, the public authorities are pursuing a twofold objective: to support construction, and also to develop home care for the elderly for as long as possible.
A tax reduction under the "Censi-Bouvard" scheme that can be combined with the status of non-professional furnished landlord (LMNP), or a "Pinel" tax exemption, for example.

1. **The Censi-Bouvard** law allows an income tax reduction, spread over 9 years, of 11% of the value of the property purchased, up to a limit of 300,000 euros, regardless of the number of properties acquired. That is a maximum of 3,666 euros/year for nine years. If the investment exceeds this ceiling, it is possible to carry the difference over to tax for the following 6 years, provided the property is still rented. The furniture is not tax deductible, but can be depreciated over 6 years. It should be noted that to this ceiling of 300,000 euros must be added the notary fees, the land registry tax, etc., but not the 20% VAT which is reimbursed by the tax authorities.

2. **The Pinel Act** can now also be used to invest in senior service residences. With this scheme, investors are entitled to a tax reduction, calculated on the amount of the real estate investment (including notary fees), the amount of which (12%, 18% or 21%) depends on the rental commitment period chosen by the investor (6, 9 or 12 years). VAT is not recoverable.

3. There is a third scheme that may be of interest to taxpayers in a high tax bracket (30% and above): the **LMNP (Non Professional Furnished Rental) without tax reduction**, but with a depreciation scheme. Here VAT (20%) is recoverable (including for furniture), acquisition costs are deductible from the amount invested, as well as loan interest, management fees, insurance premiums, rental charges, co-ownership charges, etc. Above all, the real estate investment can be amortized over a period of 25 to 30 years and 7 to 10 years for furniture.

It would be worth exploring the potential link with other subsidies which are available to assist with construction of housing to assist disabled people. They concern the financing of work related to disability (or the additional cost of new construction). However it is a complex system involving a large number of organisations so requires specialised investigation. This assistance is granted in the form of loans or subsidies, some of them are means-tested. They can be obtained from various organizations:

- Habitat Improvement Allowance (PAH) via the National Agency for the Improvement of Habitat (ANAH)
- Social Assistance Department of the Social Security Funds (CPAM, MSA...)
- Departmental Compensation Fund via the MDPH

- Main pension fund (if you are over 60 years old) and supplementary pension fund (no age criterion)
- Others: mutual insurance companies, specialized associations (NAFSEP, social works, charities...)
- Centre Communal d'Action Sociale (CCAS) in the commune of residence.

e. Other innovations

The French partner reports that the government is currently exploring a microcredit scheme which will enable low-income elderly people to finance their adaptation work. The tax credit for housing adaptation will be improved: it will target the elderly and people with disabilities. The list of eligible work, which has been in force for almost ten years, will be reviewed to enable seniors to benefit from this tax credit for new technologies to support independence in the home. The Government will examine the advisability of allowing the descendants of the elderly person to benefit from this tax credit when they pay the home adaptation expenses eligible for this tax measure.

And to give an example of a pilot innovation project we have learnt of an idea in the Nord department to develop a “Technicothèque” project: a resource platform based on the circular economy. The Technicothèque enables beneficiaries to be provided with all types of equipment that compensates for or prevents a deficiency, a handicap, a loss of autonomy. More than 300 technical aids are listed, ranging from warning devices to aids to facilitate mobility or toilet use.

Some examples: TV booster lifts; grab bar; wheelchair; tele-enhancer. The tools granted are individual but **must be reusable**. As part of a circular economy approach, the **Technicothèque encourages beneficiaries to return unused or no longer suitable equipment.** This approach limits waste and encourages the reuse of equipment, for better control of public expenditure.

The French partner makes a final point that there are significant psychological and informational factors that slow down progress on adaptation of housing in practice. In particular:

- Lack of knowledge of distribution channels and the complexity of the steps to be taken (85% of French people are unaware that they can benefit from aid for adapting their home to facilitate home care – source?). “ANAH, pensions funds, the department... It is difficult to find one's way through the maze of existing aids. "There isn't a single funder and they all don't have the same rates” (Silver Valley).
- Lack of coordination between the different funding windows
- Different use of autonomy scales by different funders.

The French partner believes that what is needed in France is the adoption of a holistic strategy to adapt to ageing, resulting in the establishment of **single point of information and advice centres**. This should improve the co-ordination of assistance of all kinds at local level, in particular by organising **access to adaptation work and home services in single points of contact**.

3. Discussion and conclusion

We propose that in the first instance there is in fact a single unified economic model for all 4 regions (nations) as follows:

To achieve improved healthy ageing outcomes, each state must find the most financially efficient way to cover the cost of high impact (high ROI / rapid payback) forms of improved new build design and agetech installation, as well as the larger task of adding agetech retrofit and adaptation to existing stock. The goal is to achieve better than current overall outcomes and value for money for all key stakeholders ie. senior citizens, state, housing providers and care providers, thereby improving independent healthy living outcomes whilst preventing unaffordable levels of expenditure.

Each country/region has a different mix of housing culture and policy, and arrangements for financing the care and support of senior citizens. So the details of the best version of this economic model vary in each region.

Within this overall economic model there are separate strands or sub-models which are also common to the 4 regions but need to be tailored to the specific circumstances. They are best considered in a logical sequence based on either the provision of new build housing or of adaptations to existing housing. These have been identified from the list of ideas proposed in the previous discussion paper, and represent the most promising approaches:

Economic model interventions for age-friendly housing

1

The most fundamental is to start with **planning policy** to ensure that the most ambitious standards are set for smarter caring housing that increasingly looks after its occupants as they age, thereby improving healthy ageing outcomes and reducing state expenditure. Closely linked to this is the ability of the state to identify sufficient of its own **land** (or to acquire it) to control the delivery of such planning goals more precisely, and with conditions attached to specifications and targeted residents.

The economic model case is that the cost of achieving planning policy targets is generally absorbed into the business models of private sector developers and/or the housing market. At the margins there may be a trade-off between setting aspirational targets and achieving a lower scale of delivery.

2

The next logical step, if the first means of achieving the economic model cannot be used (either because of policy resistance – perhaps in the form of lobbying from the property sector – or in the case of housing that has already been completed) then national and local government should find efficient and robust ways to **incentivise housing developers and builders** to achieve age-friendly and agetech outcomes, including the buyers of completed units.

We propose a tax relief on the rate of taxation of developer profit proportionate to the number and level of age-friendly design/technology inclusion in new build schemes.

The economic model here is based on the amount of tax revenue foregone leveraging a greater sum in future revenue expenditure saved.

3

Next comes any means to enable and **incentivise older people and/or their families** to purchase age-friendly or agetech fitted housing, or to retrofit products into existing housing.

Simplest route: Reduce or remove VAT on renovations, adaptation and agetech products; or reduce or remove purchase tax on new age-adapted housing.

Economic model: the tax revenue foregone model applies here.

4

Next there are **self-payers who need an appropriate and affordable level of service** which can also help to **cross subsidise those who cannot pay** – enabled through supporting home improvement agencies to grow and become a key part of delivery.

There is a need for coordination of adaptation information and funding into a single point of contact – this could help coordinate the practical delivery of adaptations by trusted public and private sector contractors.
Economic model: better coordination and building the capacity of silver economy companies to deliver high quality installations will achieve economies of scale and greater impact without any necessary increase in public expenditure.

5

Finance system to increase agetech uptake and enable individuals, their families and local authorities to cover the upfront cost of agetech installation through a standardised rental or leasing model repaid by the best combination of self-payment, welfare benefits, insurance policy or state cost savings. Creating an organisation to address this would also address the identified problem of the lack of information about suitable products and the best way of funding them.

Economic model: Part of the reason for slow uptake of agetech products is a market failure caused by lack of liquidity combined with lack of information about products and funding opportunities among the target audience (or their families). Both problems can be addressed by modest initial expenditure to create the vehicle that offers the credit function, with the liquidity itself being ultimately revenue neutral or in fact profit-making (and therefore able to assist the most needy individuals as well as foster innovation) as is the case with the parallel Motability example operating in the UK.

We can summarise and simplify those options into a single set of interventions, with a very brief reflection on the French perspective as represented to us:

Process stage	**New build**	**Retrofit**	**France?**
Planning system	Possible		Not a priority
Public land allocation	Possible		Not a priority
Construction of smart caring homes	Tax incentive for developers / investors	Tax relief on adaptations	Explore both
Incorporation and provision of agetech	Widen tax incentives to include	Adaptation funding to include more agetech	Explore Link to green investment plan
Consumer acquisition of agetech		Financing vehicle for consumers Information campaign	Explore with tech library idea / credit aspect

In each case the primary role to stimulate the increased level of activity comes best from central government as it has the overview and can take decisions where increased investment in one area has benefits across other areas (eg. housing funding achieving health savings).

However, other actors can initiate change by piloting innovative approaches, for example local government, housing associations and property developers especially those targeting the elderly. These can demonstrate how scaling a successful approach would be possible through government support.

In France we recommend that the following areas are explored with stakeholders in the dissemination of the project findings:

For new build:

The state already offers some significant and popular incentives to investors in senior housing, but:

1. Could more be done to allocate land and set planning targets for such schemes?
2. Can the same type of tax incentives be applied to the cost of approved agetech product installations?

For retrofit:

1. Public provision for adaptation costs is good for those on low incomes. However, for around 900,000 'less modest' households who can in theory pay for some or all of the adaptations that would significantly improve their wellbeing, they may not do so unless they are offered some incentive in the form of tax-efficient solutions.
2. Disability adaptation funding should be widened to support innovative but proven agetech products.

Other innovations:

1. Emerging idea of a technical library in the Nord department. But it also made it easier for retired people to access credit. Could an 'agetech library' for seniors to try different products work? Availability of credit if they wish or need to purchase them would also be helpful. Do

people pay anything? Could it be scaled up by requiring a deposit to be paid, which is refunded when the product is returned? This could develop into the wider agetech financing vehicle Allia has proposed.

2. Single point of information and coordination proposal.
3. How to get ANAH to consider a wider range of agetech products?
4. Can smart caring features be included in the new green retrofit programme announced by the French government?

In conclusion there is an opportunity for the governments of the project participant countries to accelerate progress towards age-friendly and agetech-enabled housing for their ageing populations through adopting and supporting some of the financial and economic model innovations outlined.

The opportunity is increased by recent mass awareness and sensitisation to the issue – Covid-19 has helped raise awareness of the needs of the elderly in general, but particularly around loneliness and vulnerability; and also the problems of care homes. At the same time, the need for technology familiarisation that was previously held as a barrier to progress has now been accelerated by the pandemic.

Other outstanding challenges remain:

- A proven product range with clarity on optimum deployment, cost effectiveness and financial returns – AgeTech Accelerator has a key role in testing, validating and assisting with investment for further products that will improve on the capability and cost-effectiveness of options available to frontline teams
- An effective marketing system which enables consumers to understand what is becoming available
- Trusted installation partners such as local authority assistive technology departments and any certified partners; and home improvement agencies.

With further progress here we will be in a strong position to start developing the financing system to accelerate this deployment.

Has the time for silver economy housing and its ultimate expression, the smart caring home, finally come?

Appendices

1. Towards the Smart Caring Home

We present below a basic smart caring home package for a user profile which is perhaps most urgently in need of such support: an older person living alone who is at the start of physical and/or cognitive decline which could accelerate, particularly if a critical incident such as a fall were to occur. In terms of the Life Curve presented in the previous paper, they are at risk of starting a rapid decline which is potentially costly to the state in terms of social care and hospitalisation. The products listed address a set of challenges, not all of which are likely to apply at the same time, but can be selected as appropriate in order to provide support which can slow or even reverse the decline and change the journey along the life curve to one which is extended in time, flatter in deterioration and less marked by painful incidents.

User profile – living alone, declining cognition, risk of falling, low tech user			
Main product focus: low level intervention aimed to prevent first healthcare crisis with combination of face to face and technology solutions			
Passive sensor system monitoring changes to routines, health signs, wellbeing			
Tendertec	https://www.tendertec.co.uk/pricing	B2C product designed to pick up potential problems. Falls alerts, daily living activity reports, exit and wander alerts, visit alerts, trend monitoring.	£79/mth subscription
Kraydel Konnect	https://www.kraydel.com/	See below – also has wellbeing monitoring sensors	£350 plus monthly £30-50
Health Navigator	https://www.health-navigator.co.uk/	Proactive health coaching to prevent unplanned hospital care	Free
Falls prediction and prevention (also included in above)			
Zing	https://zing.fm/	Smart night light that learns personal routes and light up pathway	$49 ea
WOM phone	https://wom-mobile.com/about-us	User friendly phone with design cases which incorporates alarm, fall detection and fall prediction.	No costs on website
Cognitive Function maintenance			
Mitocholine	https://mitocholine.com/	Compound to add to food and drink which increases brain energy and slows down cognitive decline	Close to market but no price info
My Cognition	https://mycognition.com/product-home/	Training programme designed to improve cognitive fitness	No costs on website
MemRabel Clock	https://medpage-ltd.com/Memrabel-2-Dementia-Clock	Digital clock with reminders and alerts	£120
Social contact and interaction			

Buddy Hub	http://www.buddyhub.co.uk/	Matching older people to new friends	No costs on website
Local treasures	https://www.localtreasures.me/about-us/	Vetted local people to help with everyday tasks	No costs on website
Kraydel Konnect	https://www.kraydel.com/	TV-based communication portal with built in wellbeing sensors	Hub = £350 + monthly subscription = £30-£50
Move It or Lose It	https://www.moveitorloseit.co.uk/	Local exercise classes for seniors	Currently digital £6.99/month
Safety and security			
RF Lightwave technology	https://lightwaverf.com/	Smart home tech that will turn off all sockets downstairs when the upstairs light is turned on	Lighting and power starter kit £239
Medication adherence			
YourMedPack	http://www.yourmeds.net/	Organises medication, audible alerts and auto orders	Buy now link on webpage not working
Nutrition, hydration and exercise			
SitnStand	http://www.sitnstand.com/	Portable smart rising seat	£450 - £500
Droplex Hydration	https://www.droplet-hydration.com/	Smart base fits onto specially designed mug or tumbler with reminder to drink. 5 piece set.	£35
Hygiene			
Wash seat	https://washseat.co.uk/	Toilet seat which incorporates a warm wash	£235 or £55/month

Ad van Berlo of Dutch partner Smart Homes comments that in addition to a suitable sensor system and any additional specifically agetech products to assist the resident, a blend of more conventional smart homes products would add further benefits:

- extra IT infrastructure: €1500
- electronic doorlock €500
- automatic lighting + dimming: €300
- energy control: €200
- wireless audio (good quality) around the house: €1000
- security alarms €300
- installation €500.

However the question of recurring charges for some agetech products requiring monitoring could be a barrier for some potential installations. In NL monthly fees are partially reimbursed.

In conclusion, a combination of suitable but mainly generic smart home products and carefully selected agetech specific products is the start of the smart caring home becoming a reality.

We believe that the first products and packages which combine proven benefits, clear cost-effectiveness and dedicated sources of funding – and are communicated in a trustworthy way to users – could take off exponentially.

2. Financial innovation menu from previous Dec 2019 report

A. Mainly new funding mechanisms:

1. Consumer loan for age-focussed adaptations including approved technology packages:
    a. Repaid by an outcomes contract with a statutory social care provider
    b. Repaid by private individual or their family on death, linked to value of estate where sufficient. Details to be worked out including which products for which conditions are approved and eligible; how the loan is made and possibly secured.
2. Loan to local authority or housing association for additional cost of age-focussed design/technology, with or without outcomes link:
    a. Sourced from state: e.g. main department of health or similar; or from or on behalf of a social care department.
    b. Or sourced from commercial loan finance or social investment according to market appetite for risk and/or corporate partnership goals.
3. Government-backed equity release for approved downsizing – an example from a think tank has been developed for how to do this at little or no cost to the government.
4. Government/local authority innovation fund (grants/loans) for products with the greatest cost-benefit potential for positive impact.

B. Mainly tax/policy:

1. Private developer/housebuilder – if they cannot directly charge a slight increased price on the basis that the unit is more marketable to its target audience who will be willing to pay for peace of mind – they could be incentivised by:
    - a tax break for inclusion of age tech as suggested by the IME
    - or covered by a separate investment where the return is paid by either the resident as a service charge or on their behalf by a health or social care agency. This could be sourced from a social investor or other government fund such as Big Society Capital or other dormant assets. 'Age Friendly Housing Investment Fund'?
    - A version of government low cost finance for first time buyers, but where older people buying an age-friendly home are given assistance with the extra cost e.g. in the form of an interest free loan, which could be recouped when they move (unless to another age-friendly home) or die.
2. Planning system discounts linked to achievement of age-specific requirements over and above minimum standards.

C. Mainly new business models:

1. People with money/assets – a hybrid funding model combining with public money could also achieve more than either on their own. This could help address the challenge of funding long term social care, which the government has repeatedly delayed addressing properly.
2. Home improvement agencies are beginning to move into the self-funded (i.e. private) market, building on the high level of trust they enjoy as local authority agencies, and could both extend the impact of adaptations to move older people but also help cross-subsidise delivery to lower income people.