

H2020 Save the Homes

One-Stop Shops as Citizens' Hubs to support the decision-making process for integrated renovations

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Huygen Engineers & Consultants



**Covenant of Mayors Investment Forum
18 Oct 2022**

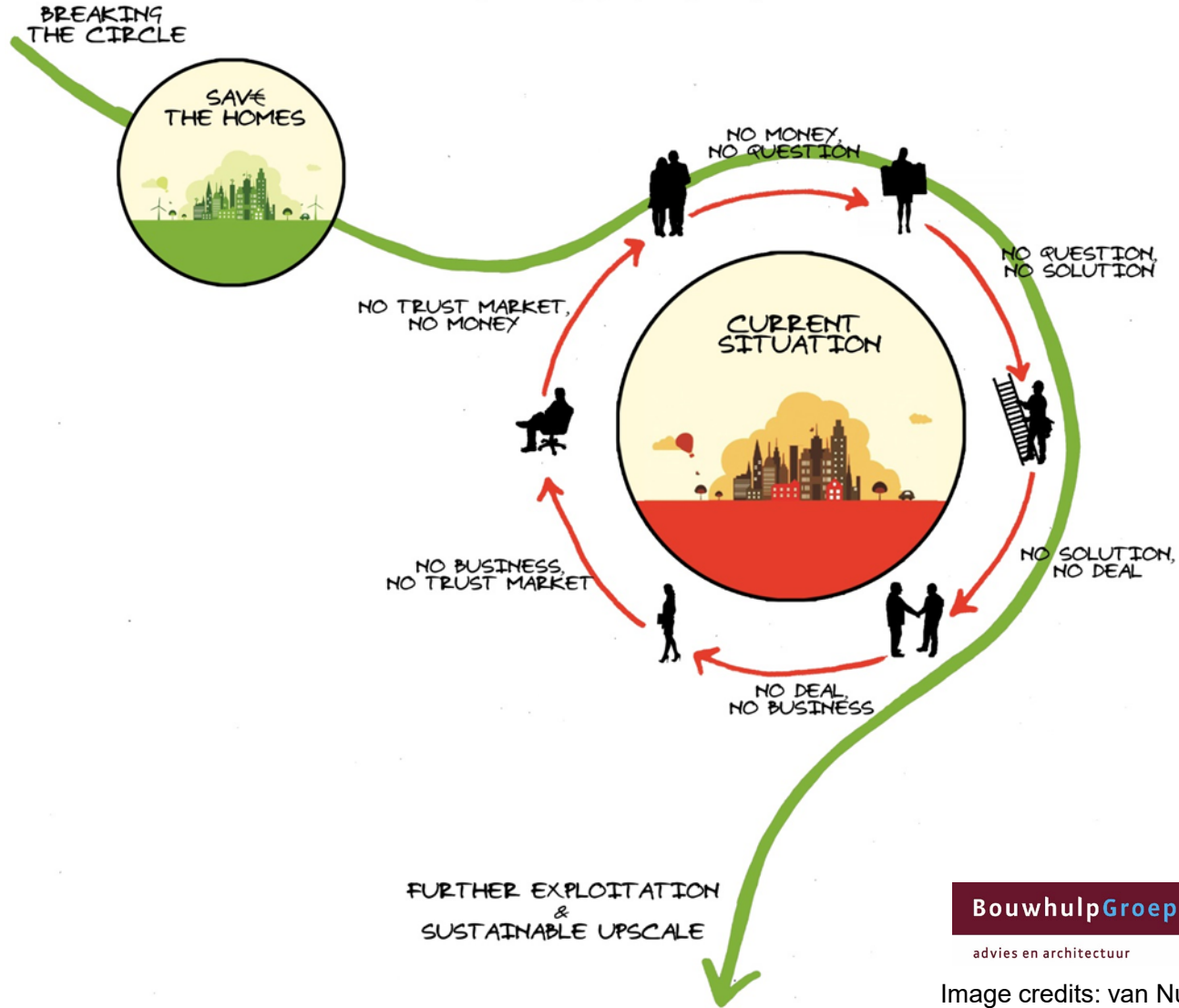


**SAVE THE
HOMES**



This project has received funding from the European Union's H2020 framework programme for research and innovation under grant agreement no 892749.

Why One-Stop-Shops & Save the Homes?



BouwhulpGroep
advies en architectuur

Image credits: van Nunen, H.,
Bouwhulp Groep.
Save the Homes, 2020



Save the Homes in the Netherlands, Spain, Slovenia

Save the Homes builds upon the current activities at:

- **City of Rotterdam**, NL
- **Municipality of Valencia**, ES

and aims to strengthen them & bring the cities renovation ambitions further within **Citizen Hubs** -> OSS inspired concept.

The two follower cities **City of Ljubljana**, SI & **Sant Cugat**, ES are developing blueprints for OSSs in their cities.

These Citizen Hubs are endorsed by a municipality, a trustworthy entity ensuring that the process is independent, transparent and of high quality for their citizens.

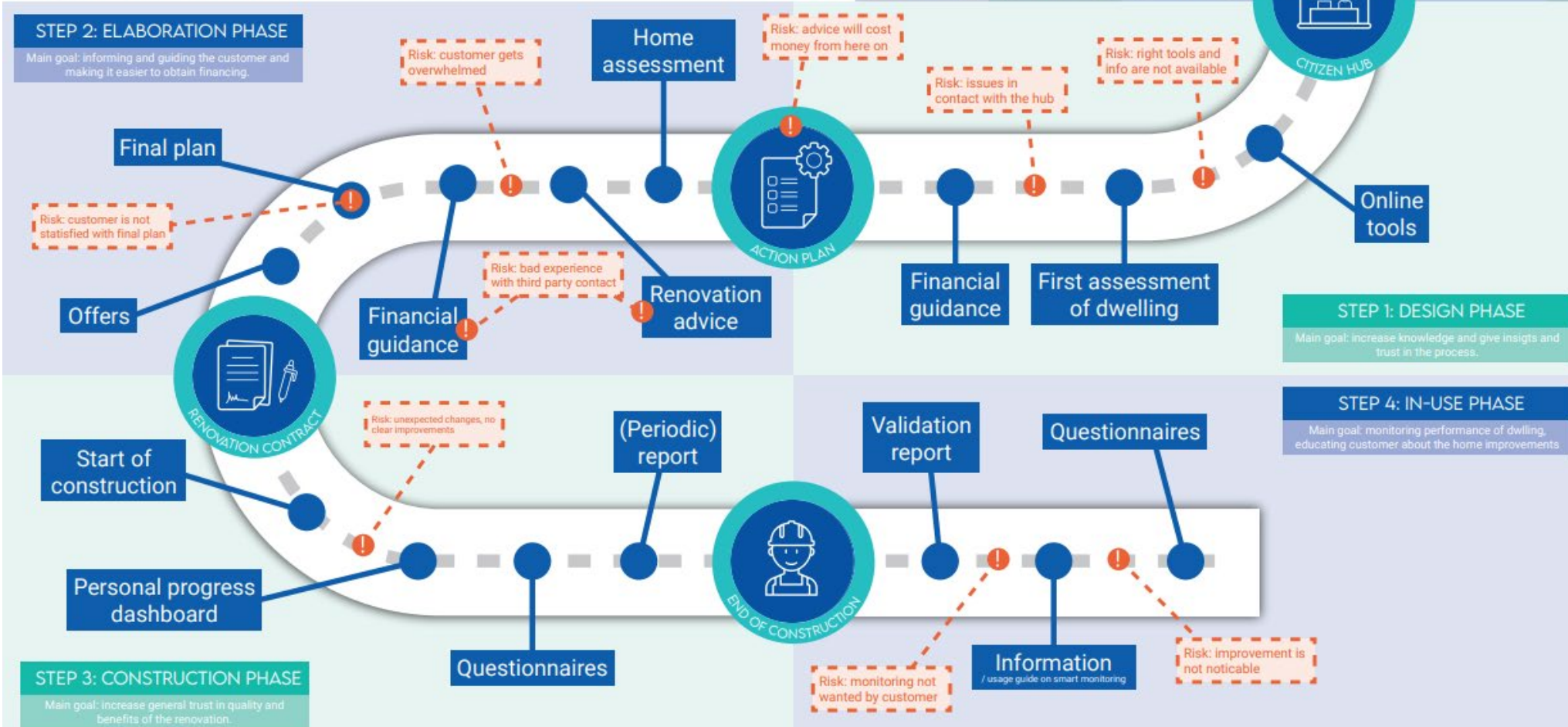


SAVE THE HOMES: THE CUSTOMER JOURNEY

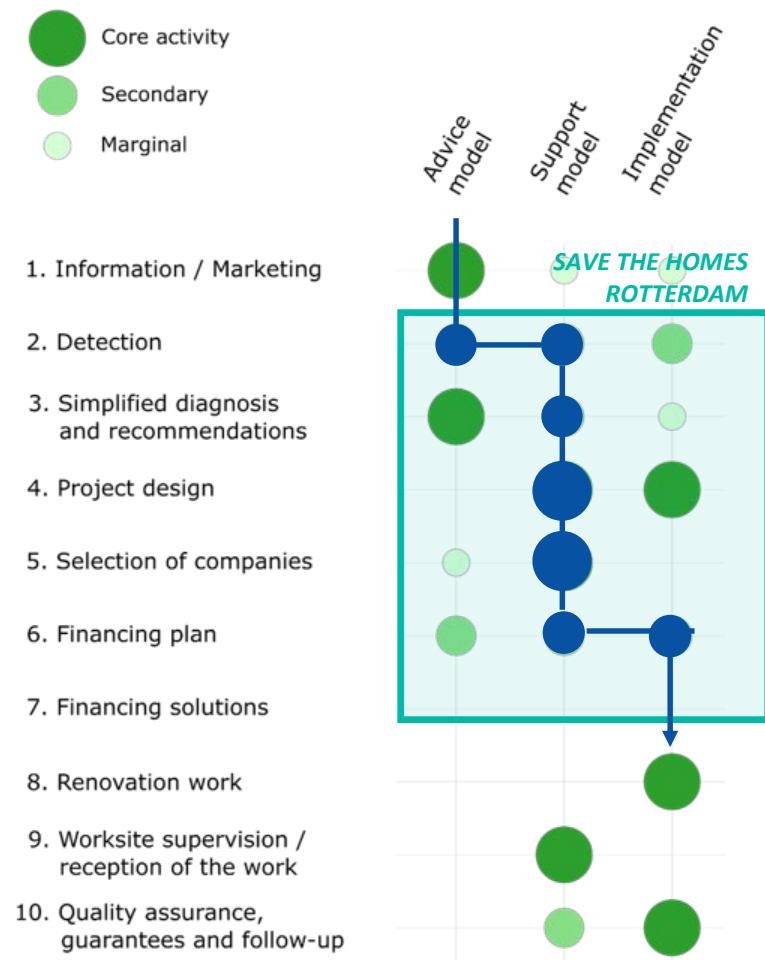
Renovation customer journey re-defined to:

- Decomplexify renovation process
- Establish trust relationship
- Provide tailor made information
- Offer continuous advice & support

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Main characteristics of OSSs in Rotterdam

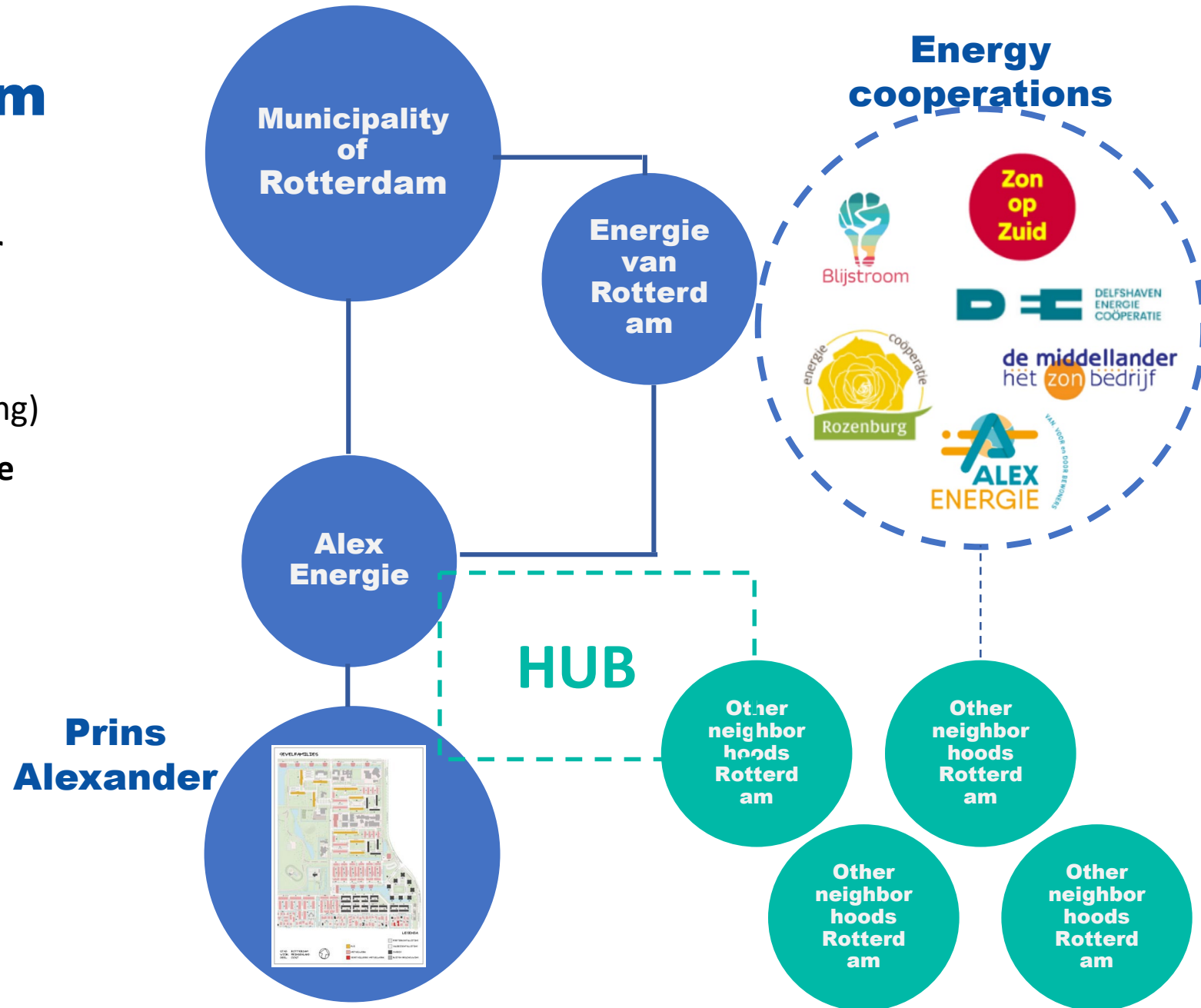


- The Rotterdam OSS aims to be an **integral model**
- Simple advice of **individual** homeowners
- Forming a **collective** to give support with minimum effort
- Combined with access to **finance**
- The HUB focuses from the part of **detection** until the **start of renovation works**

Figure: Main models of integrated home renovation services by Milin, C., & Bullier, A. (2021). Towards large-scale roll out of 'integrated home renovation services' in Europe.

Rotterdam ecosystem

- Municipality of Rotterdam as **facilitator**
- Alex Energy as **local entity**
- Energie van Rotterdam as possible **gateway** to other local entities (upscaling)
- Energie Transitie Fonds (ETF) for **finance**
- First **demonstration project** 11 homes
- Line up of **2 more projects** (6 and 350)
- **Digital campaigns** ready to start
- Renovation solutions **Menu** available

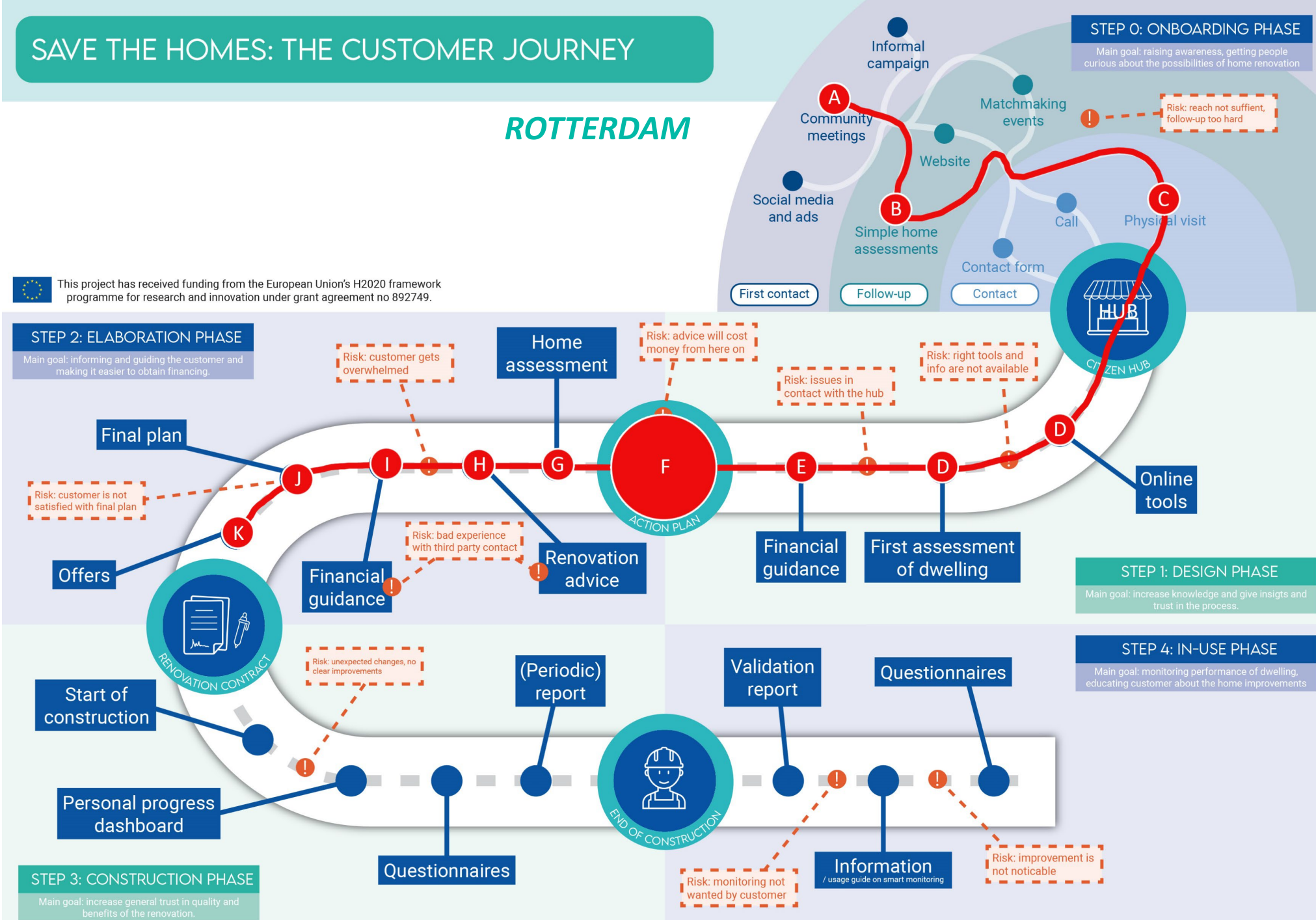


SAVE THE HOMES: THE CUSTOMER JOURNEY

ROTTERDAM

Overall – current status

- Informing home owners of renovation possibilities for their own homes with local people
- Organising a collective that can act as a client towards the market (contractors)
- Pointing out opportunities to enhance the local labour in the neighbourhood

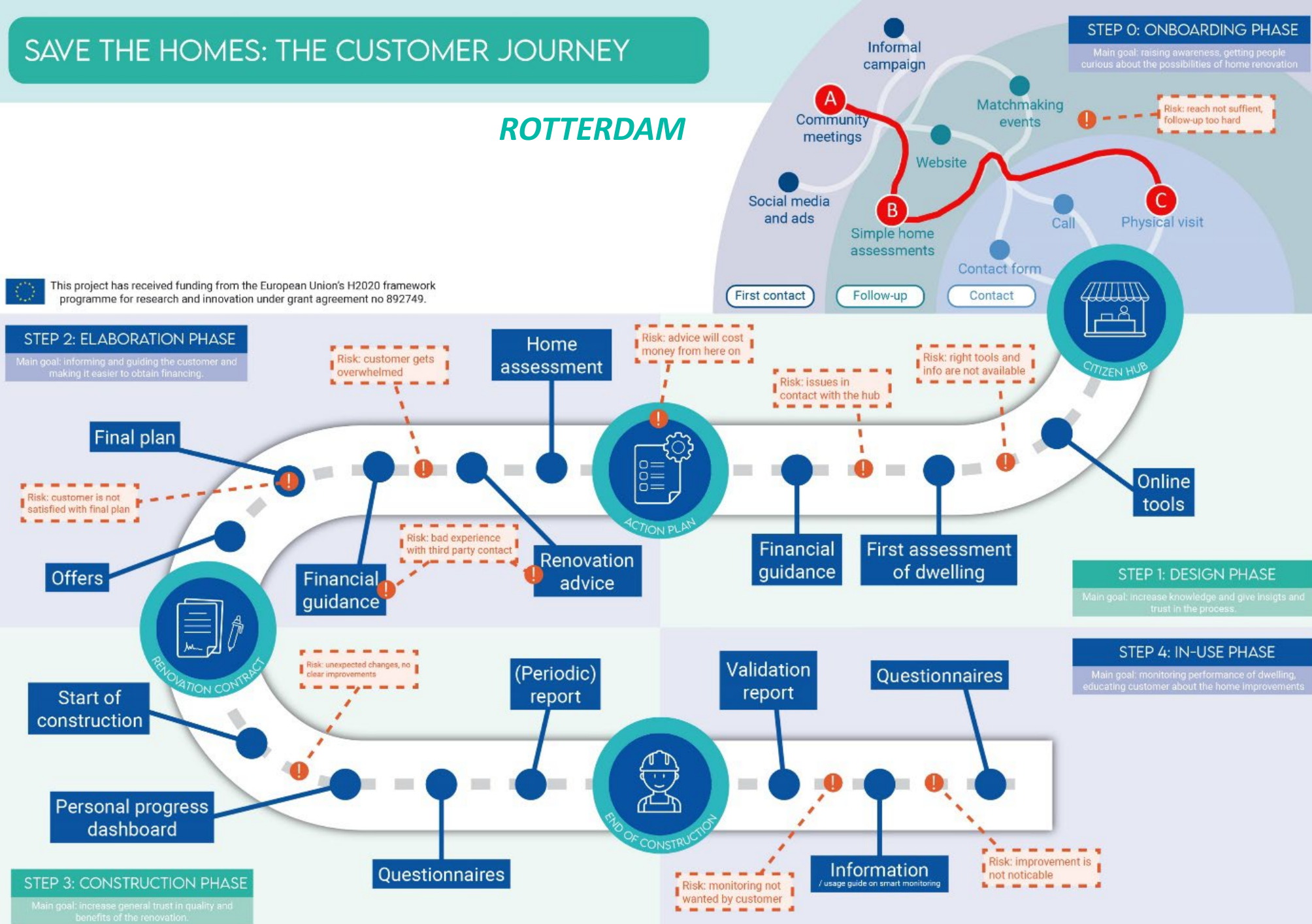


SAVE THE HOMES: THE CUSTOMER JOURNEY

ROTTERDAM

Step 0

- Neighborhood actions Alex Energie (A)
- Resident 1 seeks support from the HUB, invites neighbors to participate in a feasibility study (A)
- Feasibility of low-temperature heating in the block/neighborhood/district
- Home measurements and calculating energy losses, how to prepare homes for low-temperature heating (B)

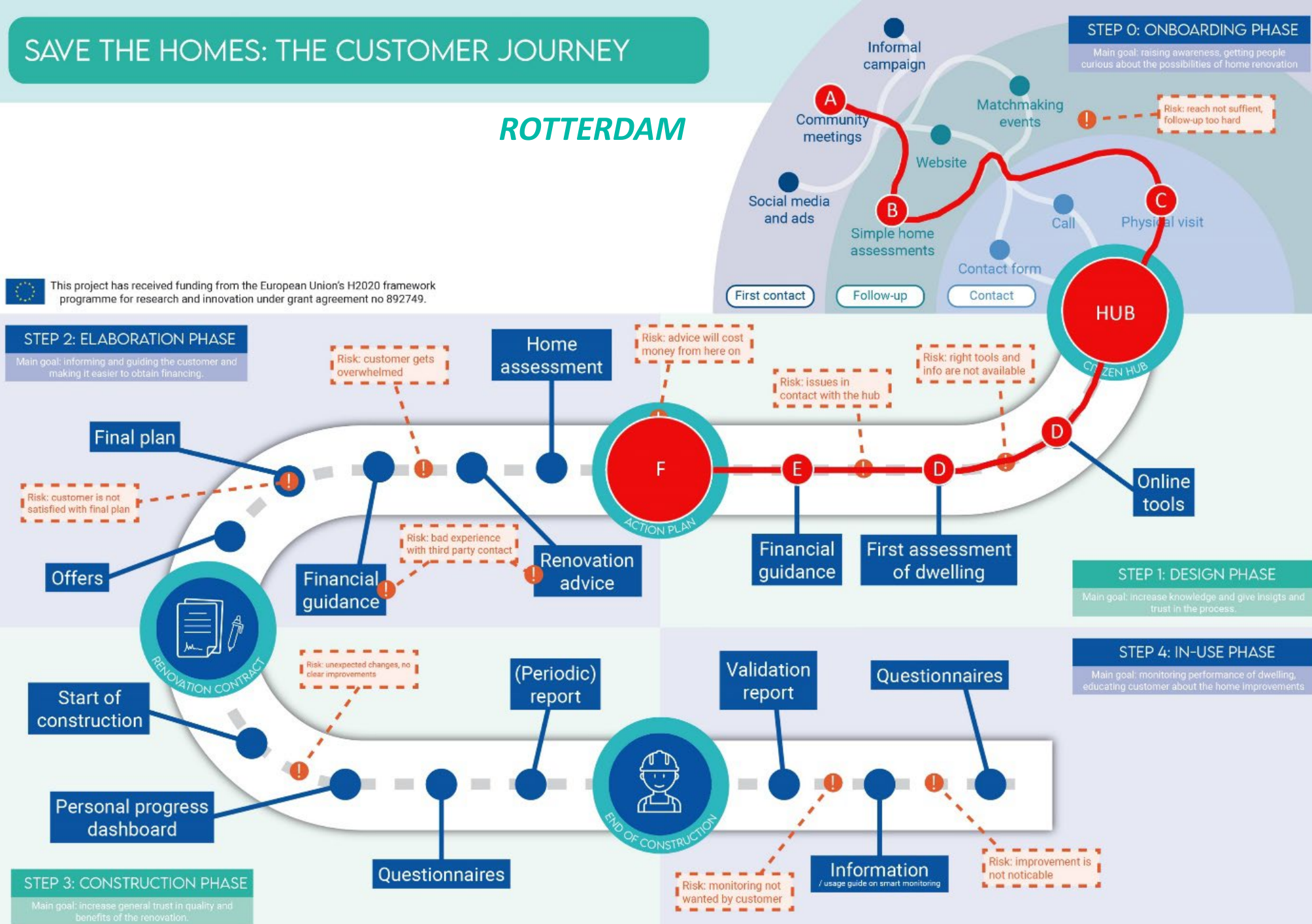


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ROTTERDAM

Step 1

- Global design (by HUB) of solutions for this type of housing (C)
- leaflet is made how to prepare for low temperature heating.
- Presentation is made to convey the analysis and the plan in understandable language (D)
- Residents evenings
- Residents become part of the HUB official.
- Choosing 1 solution for further research

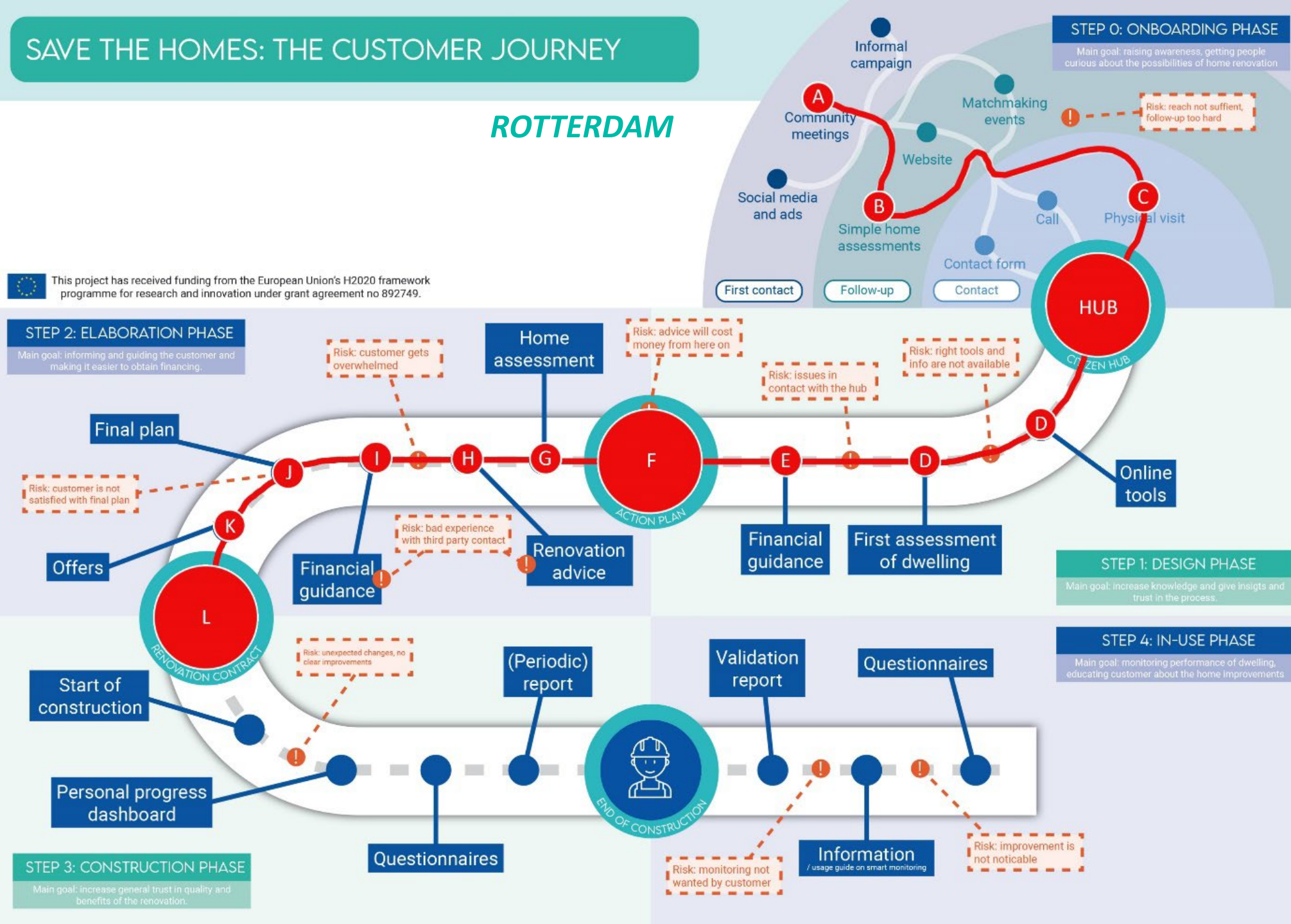


SAVE THE HOMES: THE CUSTOMER JOURNEY

ROTTERDAM

Step 2

- HUB makes interactive scenario tool for financial projection of costs and benefits per home (H) (I)
- Financial guidance and decision making for residents – home visits
- 3 more resident evenings: introduction to a professional supervisor.
- Residents submit signed selection lists and offer (J) (2/3 of the residents of the block participate)
- Quotations
- **Current status (K)**




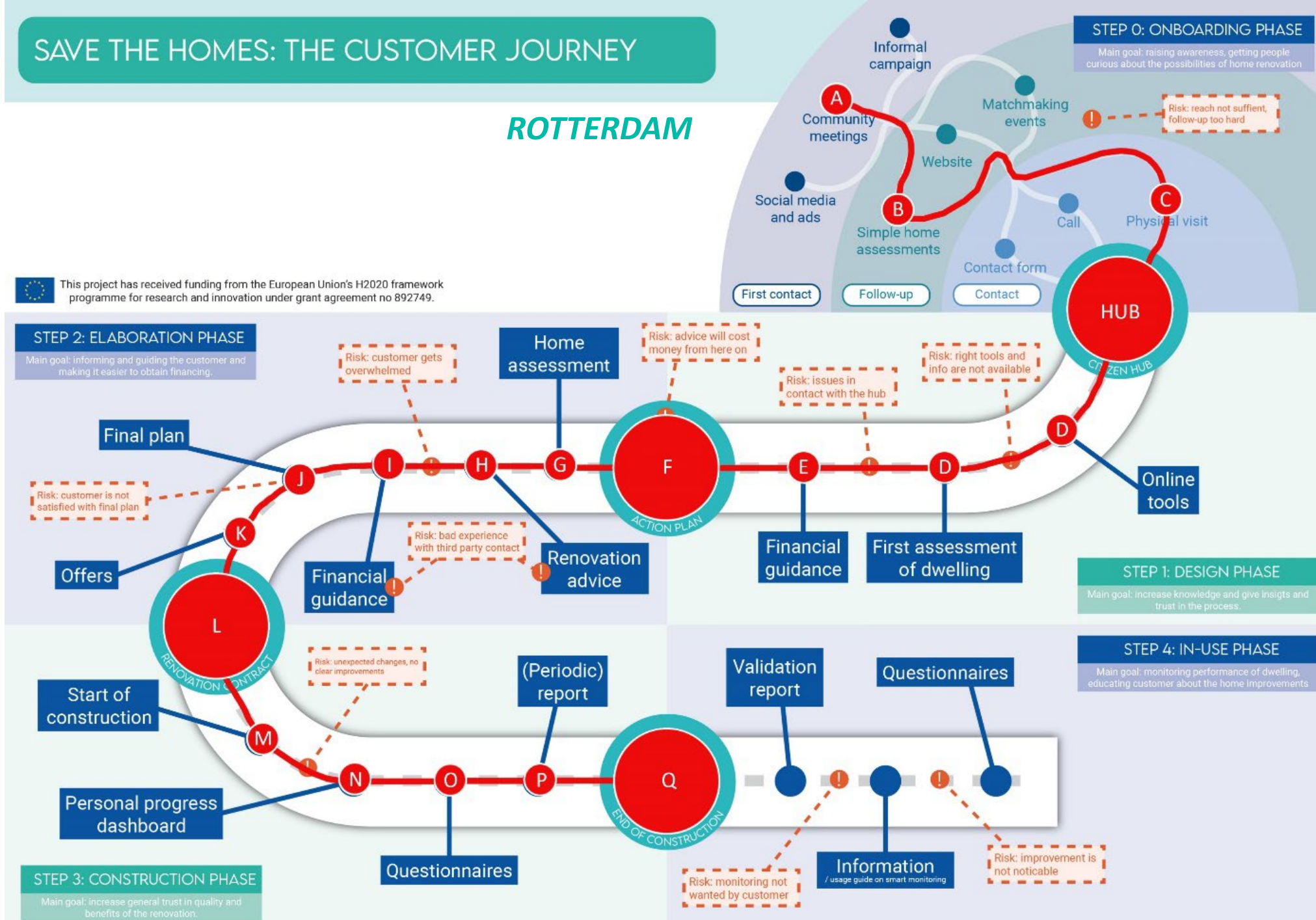
SAVE THE HOMES: THE CUSTOMER JOURNEY

ROTTERDAM

Step 3

- Selection of contractor or forming of renovation collective
- Appointing supervisor
- Work execution

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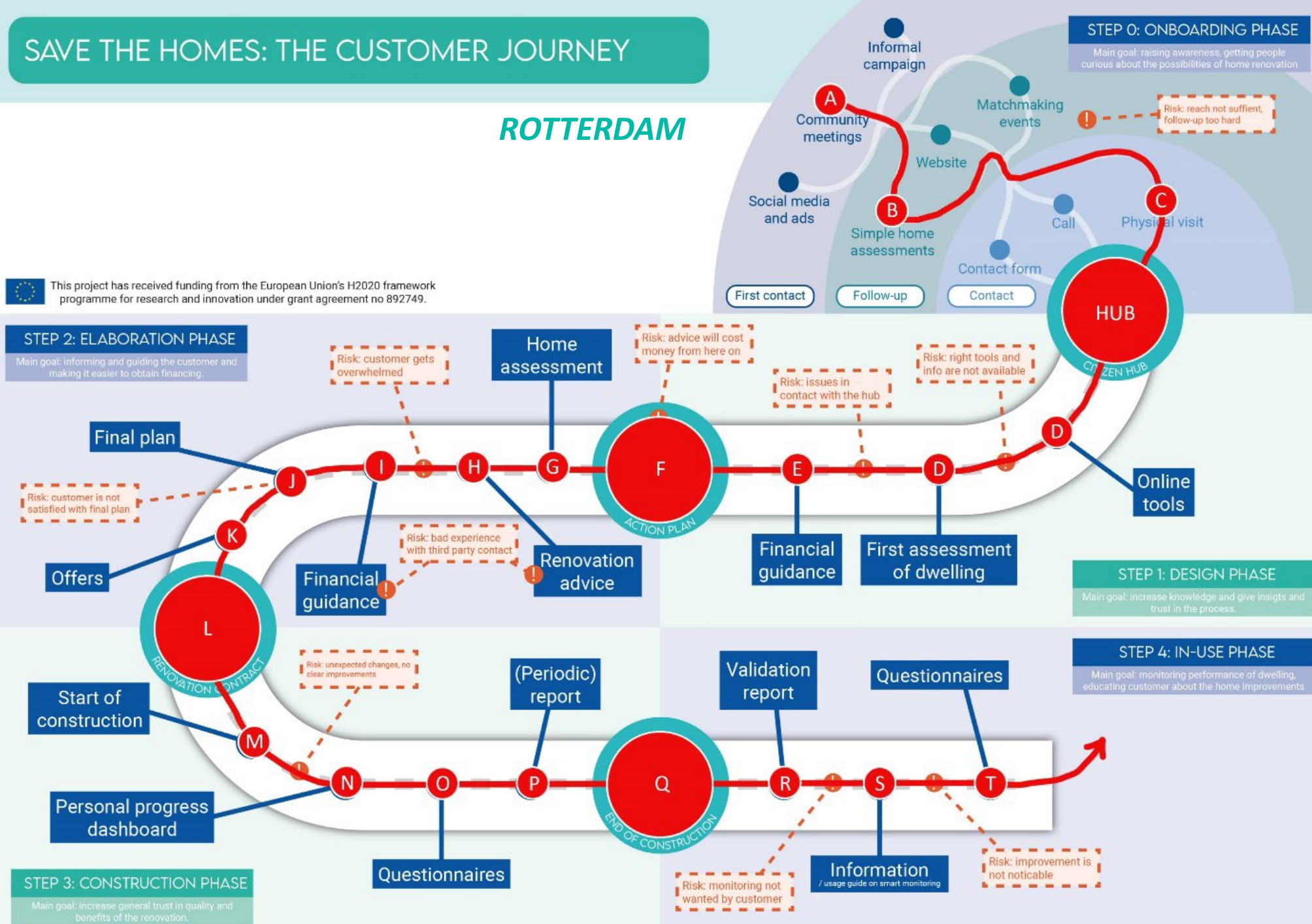


SAVE THE HOMES: THE CUSTOMER JOURNEY

ROTTERDAM

Step 1.1 (4)

- **Monitoring (R)**
- Information and communication (S)
- App IkWoon (digital tool) (new results) (S)
- Awareness heat scan, Sensi, Readout solar energy (R)
- **Making the loop (A)**



Business model – Rotterdam

<p>11 - Societal Costs</p> <ul style="list-style-type: none"> • Environmental unawareness • Energy poverty • 'Renovation poverty' i.e. citizens cannot afford funding or loans for renovation investments • High energy costs • Low standard of living due to outdated housing • Social exclusion • Lack of specialized workforce • Lack of quality in construction works • Unemployment • Healthcare 	<p>8 – Key partners</p> <p>The municipality of Rotterdam</p> <ul style="list-style-type: none"> • They are important to give credibility to the activities of the HUB, could provide additional resources/facilitation at development stage and can provide guidance on subsidies/loans. <p>Contractors, installers & architects</p> <ul style="list-style-type: none"> • These technical partners execute the actual renovation work and are therefore key to the HUB. The actual companies still need to be determined with the help of other partners and local contacts. 	<p>9 – Cost structure</p> <ul style="list-style-type: none"> • Personnel • Physical office (not initially) • Web domain • Marketing and communication actions • ICT tools 	<p>2 - Value Propositions</p> <p>Jargon free & frictionless access to the retrofitting process provided by a clear and trusted touchpoint, which results in:</p> <ul style="list-style-type: none"> • Increased comfort by reduction of energy losses, better air quality and overall wellbeing. • Lower energy bills • Increased property value 	<p>4 - Customer Relations</p> <ul style="list-style-type: none"> • Dedicated personal assistance with local people • Communities • Buyers collective for Collective Private Procurement 	<p>3 - Channels</p> <p>Offline</p> <ul style="list-style-type: none"> • Alex Energie <ul style="list-style-type: none"> ◦ home visits ◦ energy coaches ◦ heat scans ◦ Mobilization campaigns with flyers or letters ◦ Neighbourhoods meetings <p>Other parties and resources are necessary to keep using these channels in the long term, because of the limited capacity of Alex Energie.</p>
<p>7 - Key Activities</p> <p>Social</p> <ul style="list-style-type: none"> • Development of partnerships with other parties that may provide relevant resources, activities, and knowledge • Promotion of citizen participation through the identified channels. • Home visits. This also provided online by Ikwoon. Short term by Alex Energie <p>Technical</p> <ul style="list-style-type: none"> • Technical and economic pre-diagnosis of the homes (Energy Diagnosis). • Providing personal renovation measures. This is provided by the IkWoon application • Helping define citizen needs into demand and tailor made requests. Managing relationships with the contractors • Supervision of the executed work • Providing financial advice. A partner is needed to perform this activity. <p>Administrative</p> <ul style="list-style-type: none"> • Administrative support in procedures and application process for requesting financial options. A partner is needed to perform this activity • Management of services such as email or phone contacts 	<p>Energie van Rotterdam</p> <ul style="list-style-type: none"> • They could provide additional revenue stream from community-owned solar panels. <p>Bouwhulp Groep</p> <ul style="list-style-type: none"> • In the long term they may also be relevant as partner, especially for the planning of the renovation and the control/quality assurance. <p>Woonwijzerwinkel</p> <ul style="list-style-type: none"> • This partner could be used to perform the Energy Diagnosis in the medium and long term (1000 homeowners in 2022 for free). They could also potentially provide a network with contractors for isolation works and solar panels and do quality control of the renovation work and build securities. <p>EnergieSamen</p> <ul style="list-style-type: none"> • Their support could be helpful in providing contractor contacts, expert advice and technical training for personnel <p>Speeltuín Lage Land</p> <ul style="list-style-type: none"> • Support in creating awareness and providing physical access to information for the HUB as energy-related initiative 	<p>6 - Key Resources</p> <p>Personnel</p> <ul style="list-style-type: none"> • Physical office ("in-house", open hours) • Online office <p>Brand and credibility</p> <ul style="list-style-type: none"> • Alex Energie (trusted neighbourhoods) • "Municipality support" <p>Contractors list</p> <p>Supporting tools for staff</p> <ul style="list-style-type: none"> • Customer service protocol • Technical and financial calculation tools • Training for social, technical, and administrative support <p>Customer tools</p> <ul style="list-style-type: none"> • Energy efficiency factsheets and leaflets • Leaflets and brochures with technical and financial solutions for citizens • Leaflets and brochures with technical and financial solutions for suppliers/Aids and subsidies information (online) • IkWoon application 	<p>10 - Societal Revenue</p> <ul style="list-style-type: none"> • Increased comfort, wellbeing, and productivity of residents • Mitigation of energy poverty through lower energy costs • Higher quality of life for dwellers • Stronger economy and local job creation • Energy savings and greenhouse gases reduction • Raised sustainability awareness • Social cohesion • Healthcare system savings through less energy-poverty-related illness 	<p>1 - Customer Segments</p> <ul style="list-style-type: none"> • Homeowners from middle and working classes of single-family households • Households who suffer from energy poverty • Stage 1: Pilot project with 16 homes in the Neighbourhood of Prins Alexander • Stage 2: Het Lage land & Prinsenland neighbourhoods • Stage 3: The whole Prins Alexander area 	<ul style="list-style-type: none"> • Municipality channels: <ul style="list-style-type: none"> ◦ Gebiedsorganisatie ◦ Gebiedscommissie/Wijkraad ◦ School communities • Public channels <ul style="list-style-type: none"> ◦ SME and sport associations ◦ Free weekly papers (Havenloods & Prinsenlandkrant)
				<p>5 - Revenue Streams</p> <ul style="list-style-type: none"> • Short term <ul style="list-style-type: none"> ◦ Funding from the EU (StH and other similar projects) • Long term <ul style="list-style-type: none"> ◦ National or provincial and municipality funding possibilities ◦ Other EU Facilities for funding (such as ELENA facility, Life-program etc) 	<p>Online</p> <ul style="list-style-type: none"> • Advertising campaigns: social media • Website Alex Energie • IkWoon application • Woonwijzerwinkel • Municipality channels: <ul style="list-style-type: none"> ◦ Duurzaam010.nl/Prinsenland-Het Lageland ◦ Rotterdam.nl ◦ Mijnrotterdam.nl ◦ Gemeentepeiler app ◦ Social media Rotterdam.nl • Neighbourhood social media <ul style="list-style-type: none"> ◦ Nextdoor platform ◦ Website

Relevant initiatives in Rotterdam

Interreg 2 Seas Mers Zeeën
Triple-A
 Awareness + Access + Adoption
 European Regional Development Fund

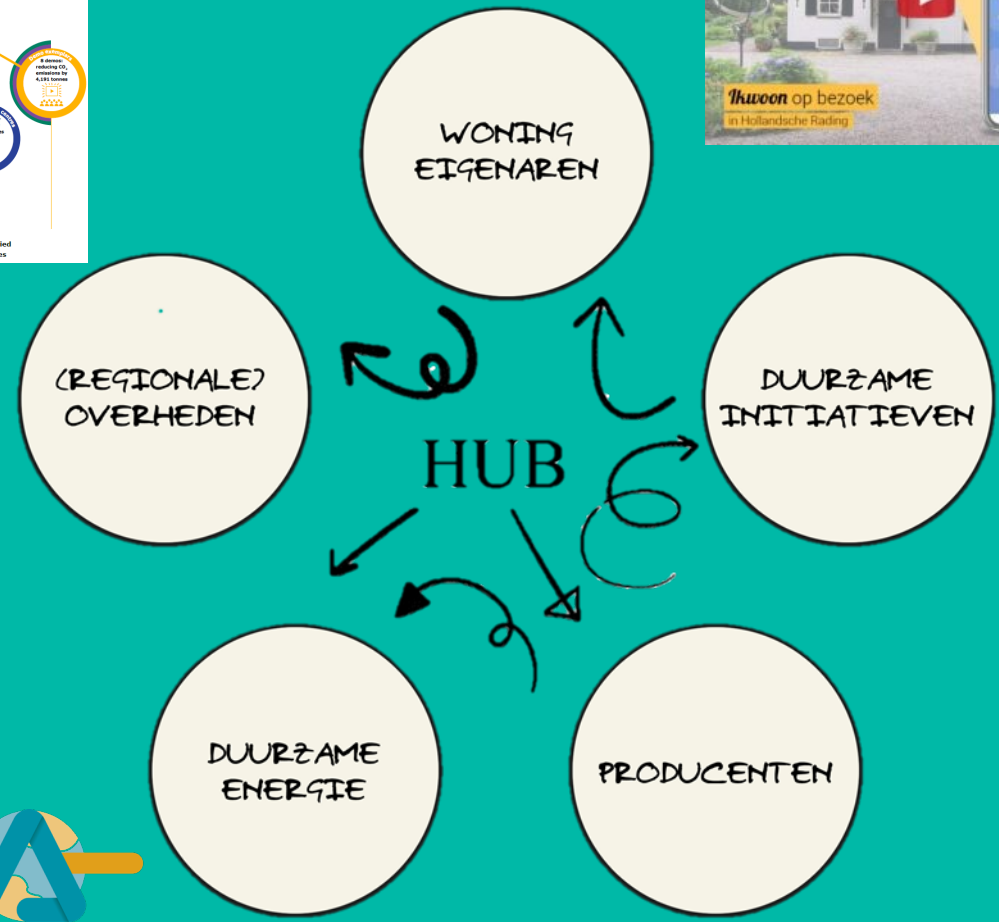
Methodology & expected output

46,000 users

Triple-A Implementation guide applied in at least 14 other local authorities



<http://www.triple-a-interreg.eu/>



Pop-up consultancy center:
 De Duurzaamheidswinkel
 (the sustainability shop)

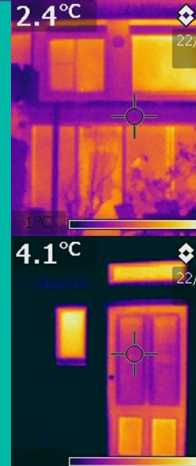


Example from the ground:

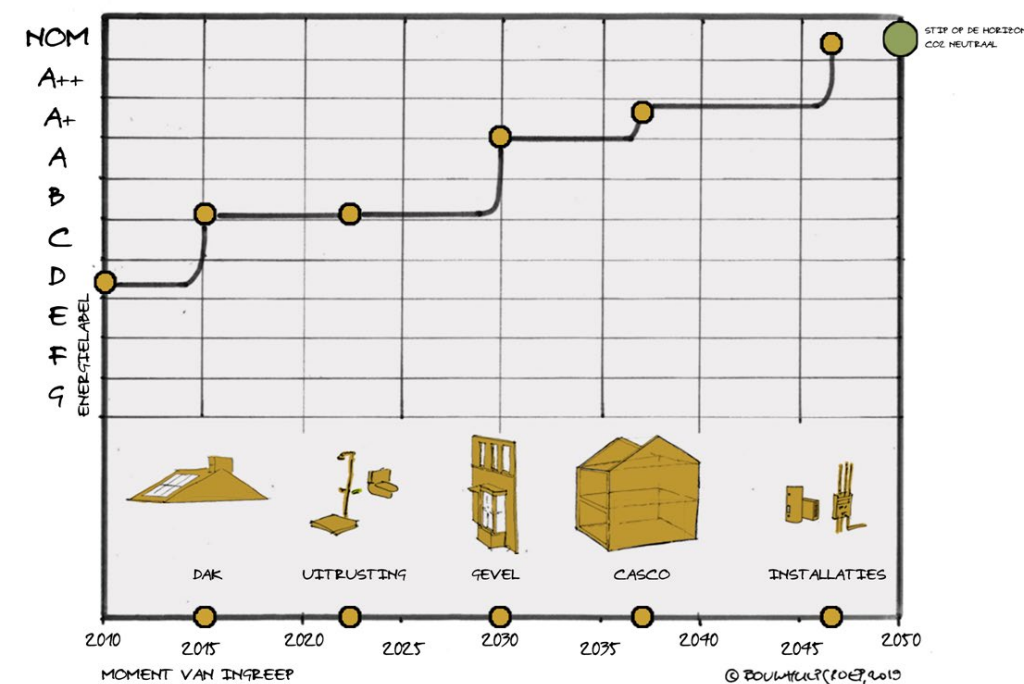


AlexEnergie -> Energy cooperative in Rotterdam, Prins Alexander

<https://www.alexenergie.nl/>



STAPSGEWIJZ ROUTEKAART RENOVEREN



<https://www.bouwhulp.nl/>

Step-by-step renovation

Component renovation concept

Start '30 seconden toets

Postcode:

Huisnummer:

Toevoeging:

Alliantie+ 30 sec

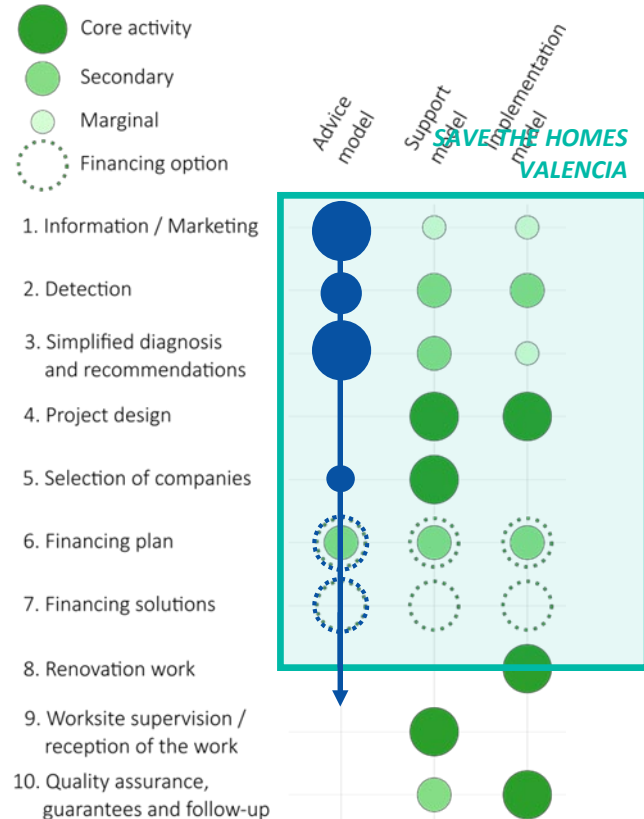


<https://www.woonwijzerwinkel.nl/>

Duurzaamheidswinkel & WoonWijzerWinkel -> Regional energy counter (Energie loket)



Main characteristics of the Valencian OSSs

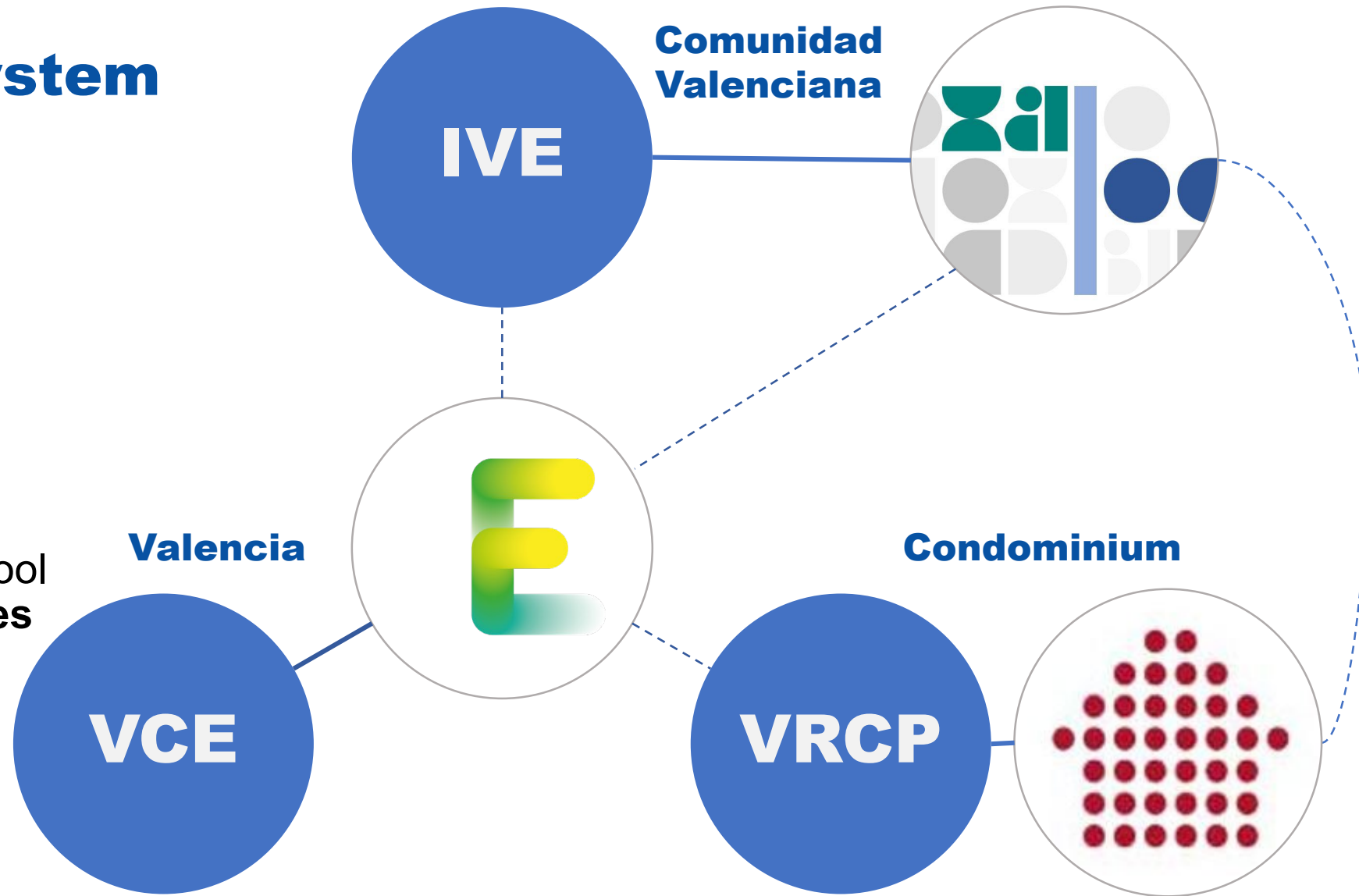


- Strong focus on **dissemination & educational** activities on media, on premises and third party premises
- **Clustering** needs, such as addressing buildings with IEE obligation or failed subsidies applications, or energy poverty situations
- Strong relay on pre-diagnosis tool **renovEU**
- Offering validated **registries**
- Pre-diagnosis comes with applicable **subsidies**

Figure: Main models of integrated home renovation services by Milin, C., & Bullier, A. (2021). Towards large-scale roll out of 'integrated home renovation services' in Europe.

Valencian ecosystem

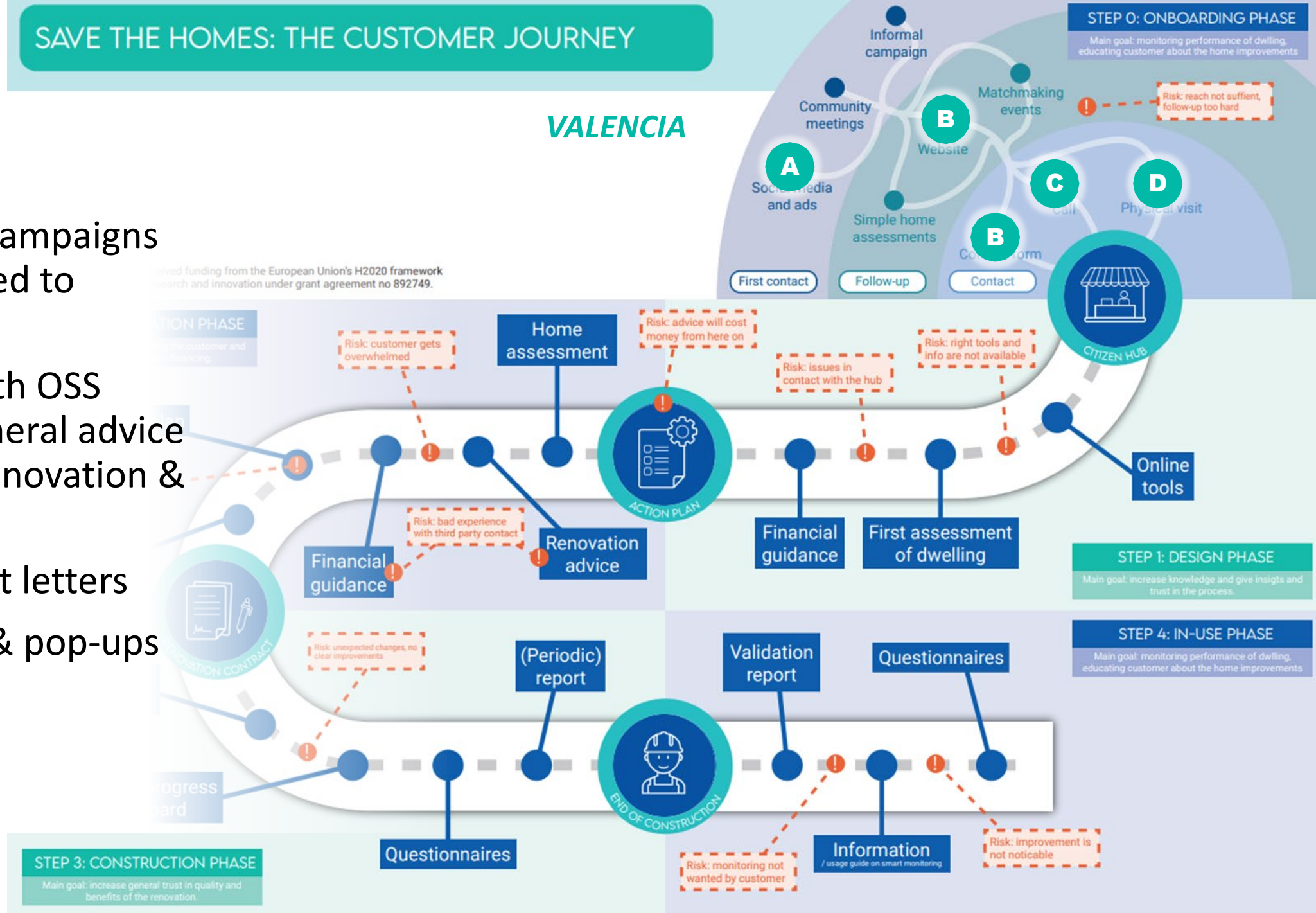
- 21 physical **offices**
- Awareness **campaigns**
- Renovation solutions **guidelines**
- Citizens' oriented **workshops**
- Renovation **diagnosis** tool connected with **subsidies**
- **Training** program for professionals
- Validated **registry**



SAVE THE HOMES: THE CUSTOMER JOURNEY

VALENCIA

- A. Awareness campaigns mostly related to subsidies
- B. Websites with OSS services, general advice on energy renovation & contact info
- C. Appointment letters
- D. Workshops & pop-ups

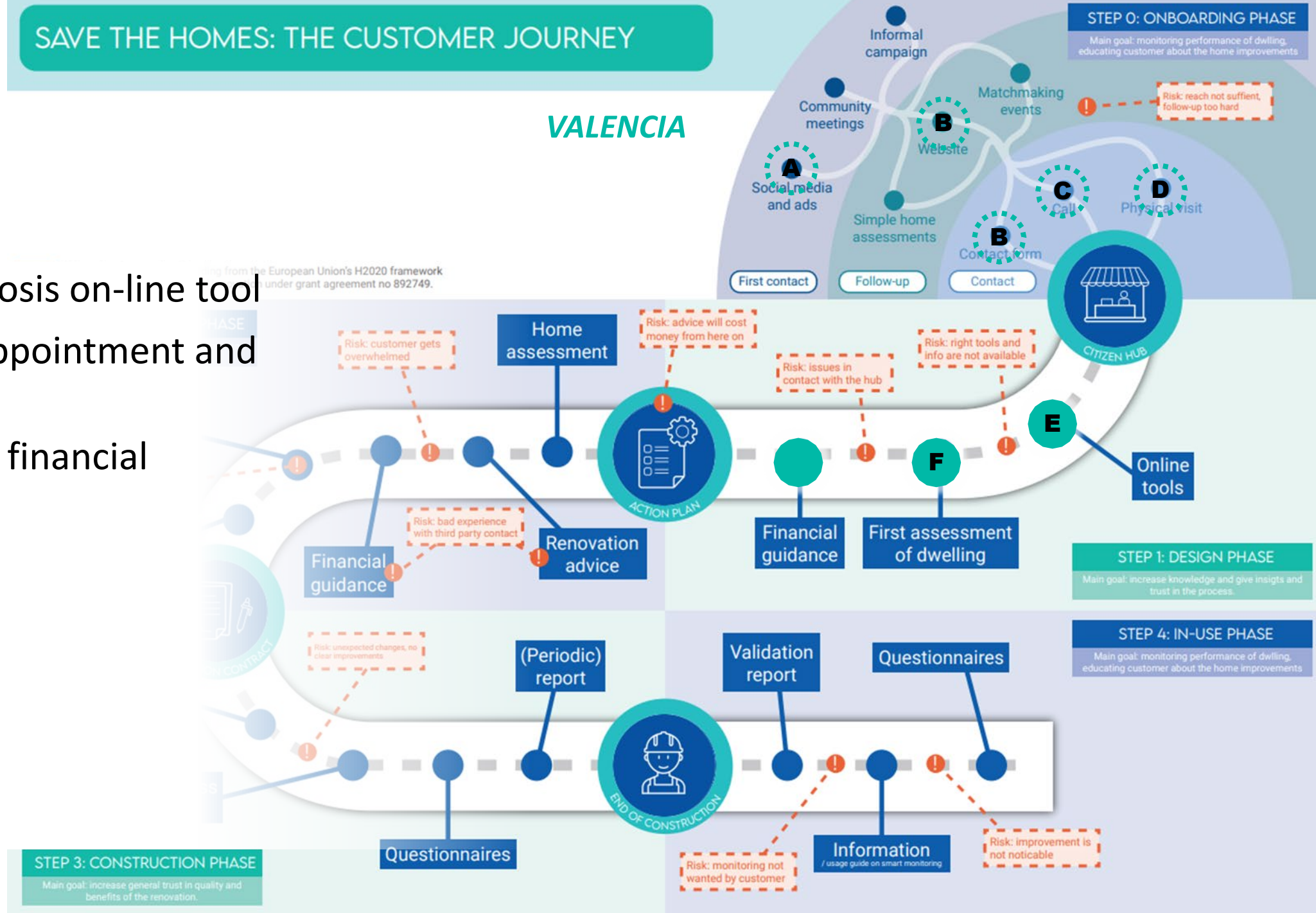


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SAVE THE HOMES: THE CUSTOMER JOURNEY

VALENCIA

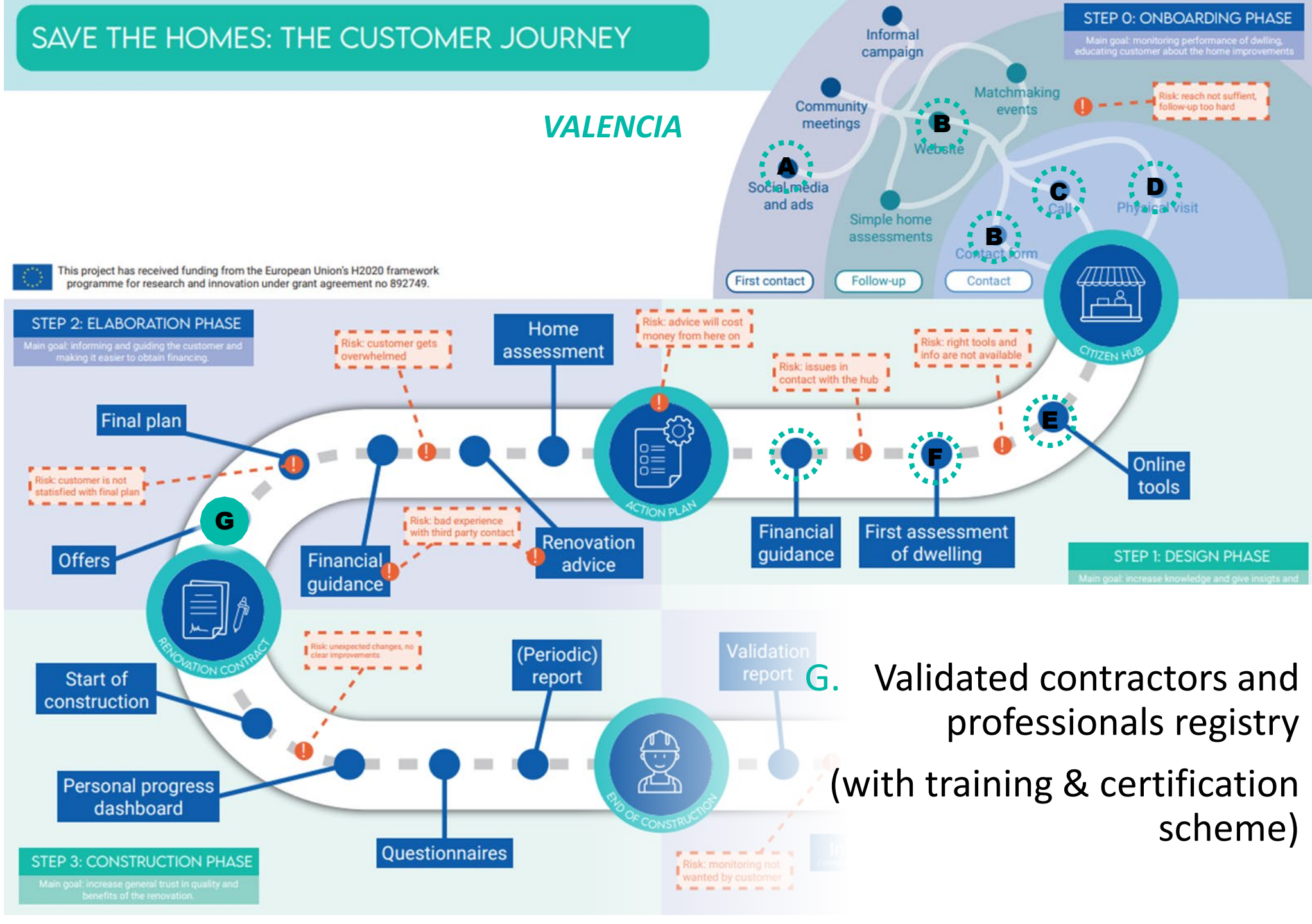
- E. Auto diagnosis on-line tool
- F. Personal appointment and report
(both including financial options)



SAVE THE HOMES: THE CUSTOMER JOURNEY

VALENCIA

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G. Validated contractors and professionals registry (with training & certification scheme)

Business model – Valencia

11 - Societal Costs <ul style="list-style-type: none"> - Environmental unawareness - Energy poverty - High energy costs - Low standard of living due to outdated housing - Social exclusion - Lack of specialized workforce - Lack of quality in construction works - Unemployment 	2 - Value Propositions <p>For homeowners: Frictionless access to an energy efficient, accessible, and comfortable home.</p> <p>For contractors, professionals, and financing entities: candid project pipeline</p>	10 - Societal Revenue <ul style="list-style-type: none"> - Increased comfort, wellbeing, and productivity of residents in Valencia - Mitigation of energy poverty through lower energy costs - Higher quality of life for dwellers - Stronger economy and local job creation - Energy savings and greenhouse gases reduction - Raised sustainability awareness - Social cohesion - Healthcare system savings through less energy-poverty-related illness 			
8 - Key Partners <ul style="list-style-type: none"> - Xaloc network - VCE - IVE and GVA - VRCP - GNE Finance - UIPI and StH Consortium - City Council, Plan Cabanyal, Right to Housing - AVAENSEN, ASELEC - Professionals' associations and colegios - Financial Institutions 	7 - Key Activities <ul style="list-style-type: none"> - OSS's personnel onboarding - Technical and economic pre-diagnosis of the home and p - Contractors' validation process - Service delivery workflows - Customer journey - Develop jargon-free information material for HO - Subsidies and licenses processing - Data gathering and analysis - Monitoring of on-going, planned and failed projects - Development of partnerships (local associations and Fis) - Workshops and events - Mediation between users and contractors - Post renovation follow-up 	4 - Customer Relations <ul style="list-style-type: none"> - Dedicated personal assistance - Long term - Automated services - Communities - Co-design of projects - Citizens' School as a participatory group 	1 - Customer Segments <ul style="list-style-type: none"> - Primary focus: homeowners in multifamily - Secondary focus: single-family homeowners - *Administradores de Fincas (Property managers) 		
6 - Key Resources <p><u>Personnel</u></p> <ul style="list-style-type: none"> - Physical office - Web portal - Sociodemographic and building data - Brand - Contractor's list - Protocols <p><u>Customer tools</u></p> <ul style="list-style-type: none"> - Energy efficiency factsheets and leaflets - Self-diagnosis tools - Comparative tables with technical and financial solutions - Aids and subsidies table 	<p><u>Supporting tools for staff</u></p> <ul style="list-style-type: none"> - Customer service protocol - Files management platform - Energy efficiency guides - Technical and financial calculation tools - Services Manual, phone assistance & Training program (X) 	3 - Channels <table border="0"> <tr> <td data-bbox="1396 876 1911 1233"> <p><u>Offline</u></p> <ul style="list-style-type: none"> - EO front-desk and appointed interviews - Workshops and target events: monthly works - Community of homeowners' meetings - Leaflets, posters, and bus stops ads - Information points including other municipal - StH Ambassadors promoting the project - Word-of-mouth - Newspapers - Collaboration with banks offices and real estate offices </td> <td data-bbox="1911 876 2530 1233"> <p><u>Online</u></p> <ul style="list-style-type: none"> - EO social medial channels and monthly newsletter - EO webinars and workshops: monthly workshops also on - External webinars and events attended - Google Ads and paid promotion - Xaloc website </td> </tr> </table>		<p><u>Offline</u></p> <ul style="list-style-type: none"> - EO front-desk and appointed interviews - Workshops and target events: monthly works - Community of homeowners' meetings - Leaflets, posters, and bus stops ads - Information points including other municipal - StH Ambassadors promoting the project - Word-of-mouth - Newspapers - Collaboration with banks offices and real estate offices 	<p><u>Online</u></p> <ul style="list-style-type: none"> - EO social medial channels and monthly newsletter - EO webinars and workshops: monthly workshops also on - External webinars and events attended - Google Ads and paid promotion - Xaloc website
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9 - Cost structure <ul style="list-style-type: none"> - Personnel - Office utilities - Marketing and communication actions - ICT tools - Travel/ outside events 	5 - Revenue Streams <ul style="list-style-type: none"> - City council funding - Regional Funding - EU Projects funding (e.g., Save the Homes and WELLBASED) - Regional subsidies under Program 2 of the Real Decreto 853/2021: 'Support program for renovation offices' 				

Relevant initiatives in Valencia

1 ¿Cómo puedes resolver tus problemas? Considera estas opciones y observa tus resultados!

2

3

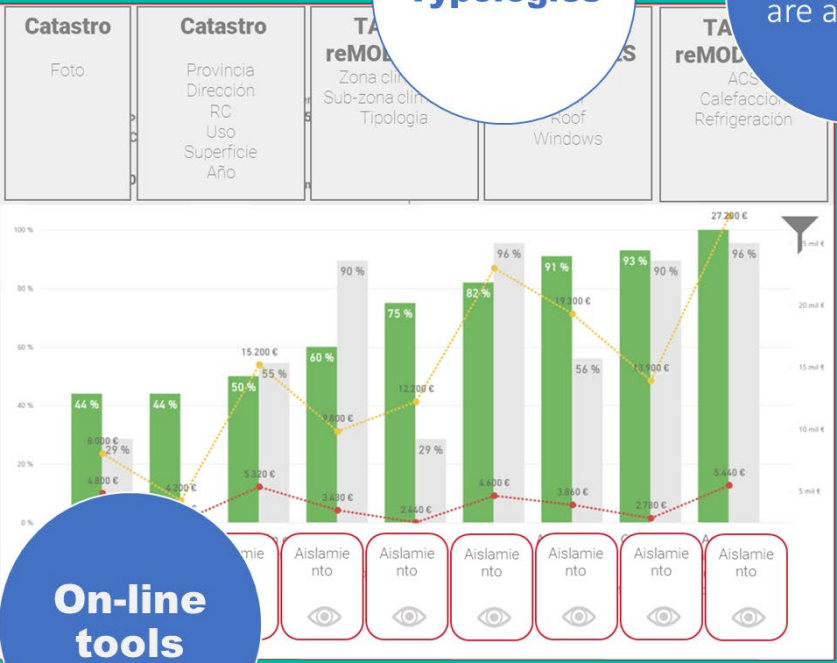
4 **Ascensor +**

5 **Nada**

EPnr
183 kWh/m²a

Fuera de confort
28% del año

Solution paths



When grants are available

Blending public grants (recovery funds) with private funds

Solutions Factsheets

Personal Appointment Letter



Estrategia rehabilitación

Informar Conocer Decidir Realizar Disfrutar

1 Este es el resultado en edificios parecidos al tuyo...
2 ¡Ahora te toca a ti!

3 **Ascensor +**

4 **Aeroterminia y fotovoltaica**

5

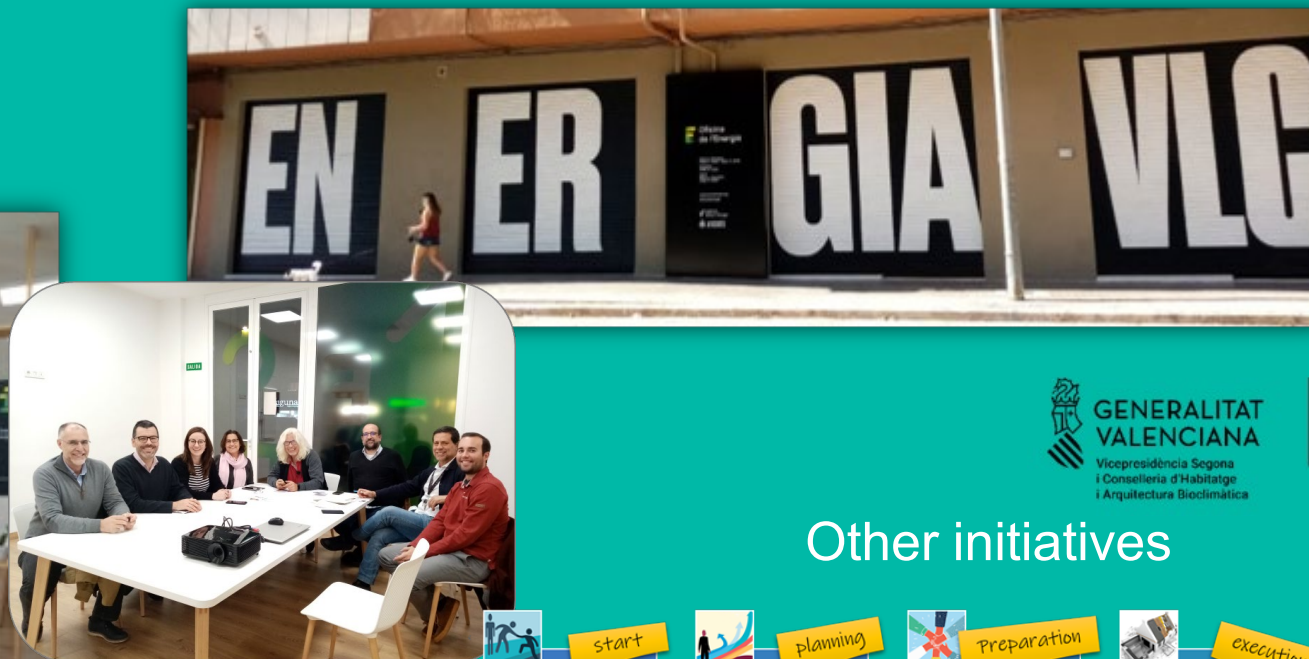
Descarga Tramita



Examples from the ground:

Energy Office in Valencia

<http://canviclimatic.org/es>



Other initiatives



- Red Oír
- RENHATA: grants for energy renovation awareness campaigns

- Online tool: test your energy consumption
- ENERFUND tool: energy certificates

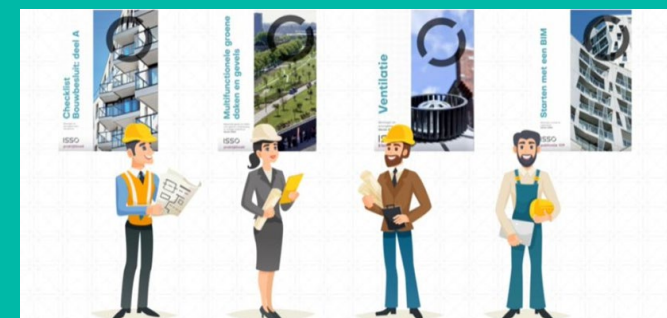
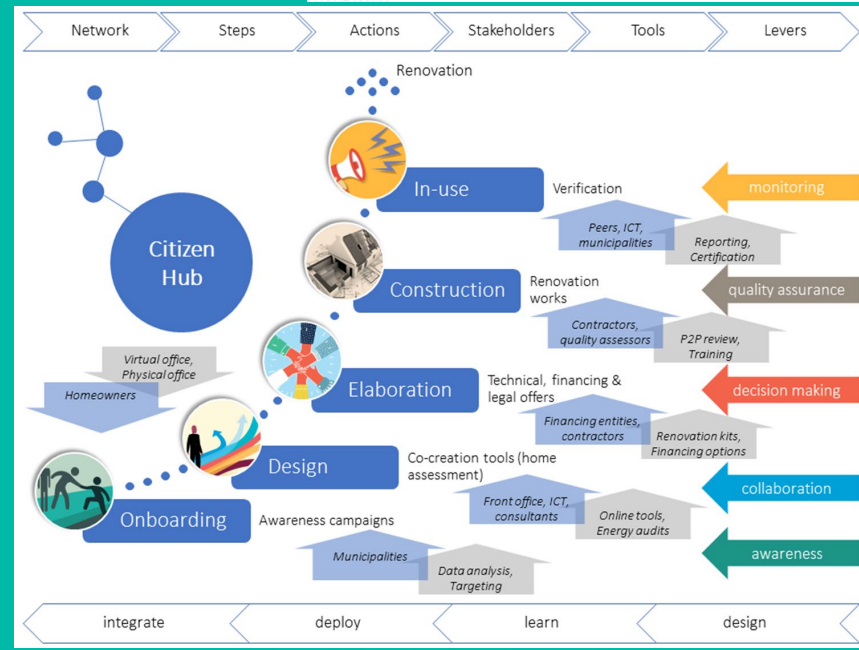
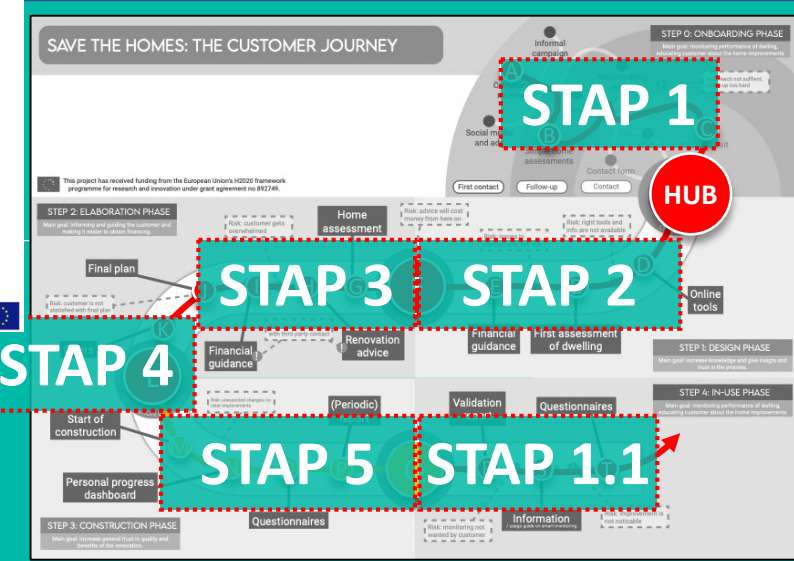
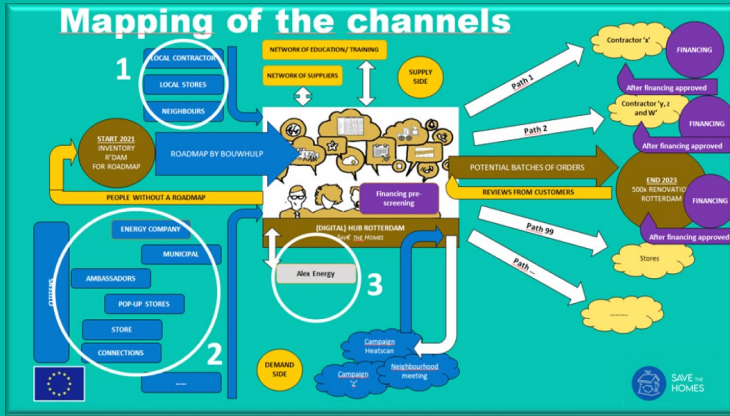
- Catalogue of constructive solutions for energy renovation
- TABULA tool

- ELIH-MED / Juan XXIII - Alicante
- Adaptative training programmes

- Energy consumption monitoring campaigns
- BES Certification
- SAVE THE HOMES



Complex process



ISDE | **SUBSIDIE KLIMAATADAPTIE** | **ENERGIETRANSITIEFONDS**

Het RVO biedt een ISDE subsidie aan voor energiebesparende maatregelen, speciaal voor particuliere woningeigenaren. Deze subsidie biedt het volgende:

- Voor private huiseigenaren.
- Deze subsidie dekt een deel van de kosten. Het bedrag is afhankelijk van de maatregelen en de kosten.
- U hoeft niet van bank te veranderen.

De gemeente biedt een subsidie aan voor particulieren voor bepaalde maatregelen gericht op klimaatadaptie. Deze subsidie biedt het volgende:

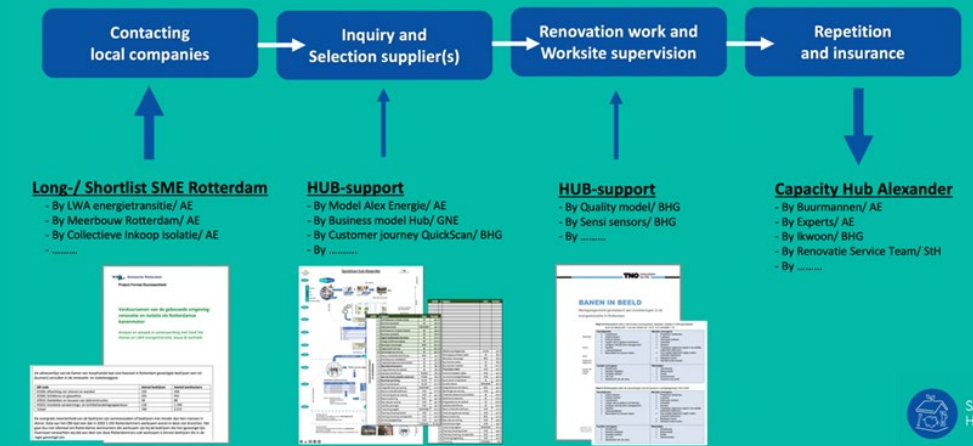
- Voor private huiseigenaren.
- Deze subsidie dekt een deel van de kosten, tot een maximum van €50.000,-.
- U hoeft niet van bank te veranderen.
- De maximale looptijd is 30 jaar.

De Gemeente Rotterdam en SVn bieden een aantal leningen en hypotheeklen aan voor particuliere woningeigenaren vanuit het Energietransitiefonds (ETF).

- Voor private huiseigenaren.
- Deze lening biedt 100% financiering van het budget, tussen de €1.500,- en €65.000,-.
- U hoeft niet van bank te veranderen.
- De maximale looptijd is 30 jaar.

Voor verdere informatie en vragen kan het volgende telefoonnummer en het contactformulier op de RVO website worden geraadpleegd.

- 088 - 042 47 47 (ma-vr 8.30-17.00)
- 14 010
- 088 - 042 47 47 (ma-vr 8.30-17.00)
- 14 010
- www.rvo.nl
- www.rotterdam.nl/oket/subsidie-klimaatadaptie-vanaf-1500
- www.duurzaam010.nl



BouwhulpGroep

advies en architectuur



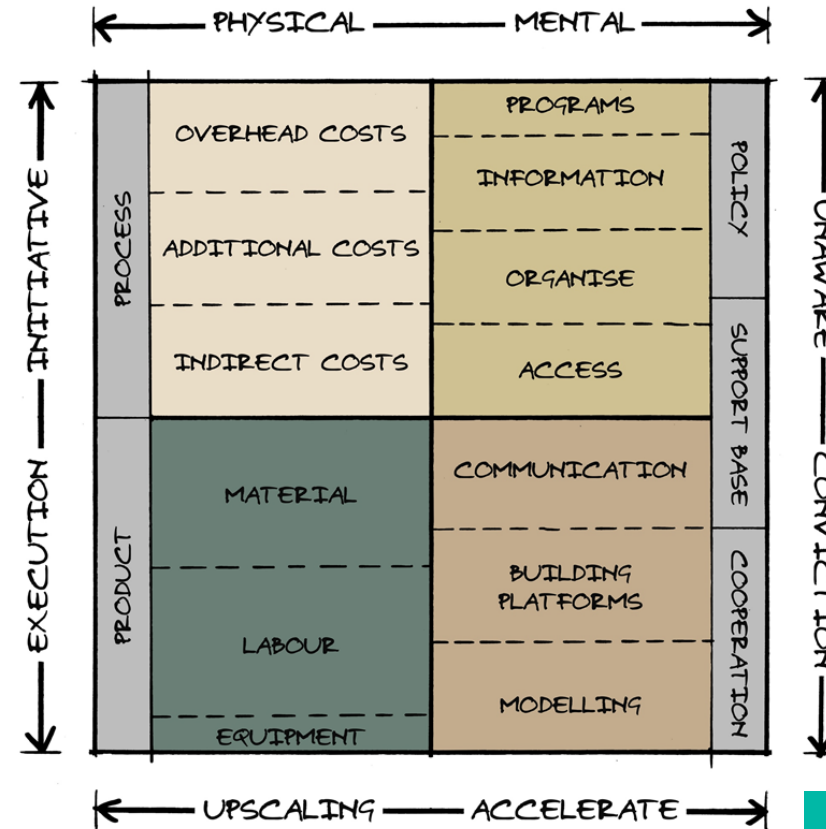
Main challenge

Energy renovations are more than just about energy:

- Product
- Process
- Policy
- Support base
- Cooperation

From unaware to **conviction & trust**
 ... and from initiative to **execution**

All together in a HUB.



BouwhulpGroep
 advies en architectuur



Reference: van Nunen, H., Bouwhulp Groep. Save the Homes, 2021.

Key takeaways

- Think big, start small: Start working on **strong network with local actors**.
- Work on how to **channel fundings effectively** (boosting use of available public funds & leveraging private financing)
- Take time: Work on **value proposition** focusing on the whole customer experience. Single entry point to cover the whole customer journey, good marketing is important!
- Have a strong **online platform** to get people interested and ensure good conversion rates (OSS efficiency). Maximize use of digital solutions & available data.
- Consider **different revenue streams**, as quite difficult to make viable BM as it strongly depends on public subsidies.
- **Widen the scope** by integrating the expertise on health, aesthetics, circularity.



Besides StH, there are many more OSS examples to learn from...

- Innovate: <http://www.financingbuildingrenovation.eu/>
- ORFEE (FR): <https://orfee-project.com>
- Opengela (ES): <https://opengela.eus>
- Padova fit (IT): <https://www.padovafit.eu>
- Holadomus (ES): <https://www.holadomus.com>
- Superhomes (IE): <https://superhomes.ie/>
- Turnkey retrofit (ES, FR, IE): <https://www.turnkey-retrofit.eu>
- Renonbill (ES, IT, LT): <https://www.renonbill.eu>



Thank you for your attention.

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