

Appendix

Table I: The key differences among the 14 BMs according to the 9 building blocks






| Building block | Business models | | | | |
|--|---|---|---|---|--|
| | BM1 | BM2 | BM3 | BM4 | BM5 |
| Brief description | Public-private climate agency | Private non-profit IHRS provider | Municipality of a larger-sized city | Municipality of a medium-sized city | Municipality of a small-sized city |
| Customer segments  | Homeowners HOAs Condominium managers (FB6) City and national entities | HOAs Condominium managers (FB6) Municipalities | Homeowners HOAs Vulnerable groups (FB5) Condominium managers (FB6) | Homeowners HOAs Vulnerable groups (FB5) Larger and medium-sized high-rise condominiums | Homeowners HOAs Vulnerable groups (FB5) Condominium managers (FB6) Actors of the supply side |
| Value proposition  | Provision of : Energy advisory services (SB2) Technical assistance (TB1, TB4, TB6, TB8) Access to grants (FB1, FB3, FB5) Utilization of building retrofit as a mean to tackle other issues such as energy poverty and greening areas projects | Facilitation and coordination of energy retrofits (TB1, TB2, TB4) Energy performance guarantees (TB1, TB4, TB5) Living cost-neutral proposition based on the multi-annual maintenance plan (FB5, FB7) Transparent communication (SB4) Providing attentive support | Provision of neutral free advisory service (SB4) Provision of tailored consultation services for HOAs who want to make their building future-proof experts assess the condition of buildings (SB2, TB8) Support to obtain subsidies (FB2, FB3, FB5, LB2) | Provision of tailored IHRS for HOAs (SB4) Increasing the building value Reduction of energy bills Provision of neutral advisory service (SB4) | Provision of tailored IHRS guidance, advice and support for overall renovation improvements for HOAs (SB2) Creation of a long-term plan to make the building future-proof & fossil free (TB1) Stimulate the local market |
| Channels  | Active use of social media platforms, municipal networks, and public forums (SB2) Arranging visits and meetings with HOAs (SB4) Utilization of digital platforms as a means to connect with HOAs and different stakeholders (SB4) | Active use of social media platforms, Arranging visits and meetings with HOAs (SB4, SB1) Participating in renovation events in the municipality (SB2) | Online request forms, newsletters Phone calls Site visits In-person consultations in the OSS (SB2, TB8) | Online request forms, newsletters, personalized letters/emails, create booklets and brochures (SB2), Arranging visits and meetings with HOAs (SB4,SB1, TB8) Participating in network events, organizing information sessions and webinars(SB2) ,providing trainings for CMs(FB6, TB8) | Renovation advisor (SB2) Social media Website Other municipal services Organizing Events Newsletter Supply side actors Participating in local and national events (SB2) |
| Customer relationships  | Customer relationship is established through: Organizing forums and visiting HOAs (SB4) Arranging trophy events for HOAs that have implemented energy renovations | Customer relationship is established by: Fostering trust between the organization and the customers by providing guarantees (SB4, TB5) | Customer relationship is established through: Future check (TB5) Engagement in the HOAs decision process (SB1) | Customer relationship is established through: Emphasizing solution-focused for co-creation (SB1) Actively involving customers in the process of finding and implementing solutions (SB4) | Customer relationship is established through: Clear communication and information to the co-owners (SB4), Participation in the project team, Support and advice (SB2) to condominium managers (FB6) |
| Revenue streams  | The main revenue is grants obtained from the Metropolitan Area and the City Council. | Revenues are generated through investment decisions made at various stages of the renovation process | The main revenue is grants obtained from the city | EU-funded projects and grants provided by national climate agencies, Exploring and providing income streams (e.g. energy savings and public funding) | Increase of Real estate value, Improvement of the living environment of the inhabitants Addressing energy poverty Local & national Funds and grants |

Table II: The key differences among the 14 BMs according to the 9 building blocks (Continued)





| Building block | BM1 | BM2 | BM3 | BM4 | BM5 |
|--|---|---|--|---|--|
| Brief description | Public-private climate agency | Private non-profit IHRS provider | Municipality of a larger-sized city | Municipality of a medium-sized city | Municipality of a small-sized city |
| Key activities  | The core activity revolves around providing a completely free public service (FB5, FB1) Providing technical (TB1, TB4, TB6, TB8) and administrative support (LB4) Raising public awareness through public lectures and events (SB2) Managing digital tools Providing advice on financial schemes (FB5) Providing access to grants (FB1, FB2, FB5, FB3, LB4) | Providing process guidance, Providing advice for municipalities (TB8, SB2) Oversee the process of energy renovations conducts webinars Sharing information and news on websites, (SB2) Publishing articles or papers in journals, Intermediation of parties offering IHRS | Providing guidance and advice Information evenings (SB2) Managing a quality platform (TB1, TB4, TB8) Assisting HOAs in applying for loans and subsidies (FB2, FB3, FB4) Site visits (TB8) Attending HOAs meetings (SB1, SB7) | Providing advice for HOAs and homeowners on energy renovations (SB2) Offering technical (TB1), and administrative support (LB6) Assisting HOAs in applying for loans and subsidies (FB2, FB5) Training HOAs on the renovation process (SB2, FB4, TB8) Advocating for policy changes (LB7, LB3, FB3) | Providing guidance and advice by a renovation coach along the customer journey (SB2, LB6, TB8) managing communication tools and strategy towards HOAs & property managers (FB6, LB6, LB7) Activation, facilitation of collaboration & establishing local market (LB7) |
| Key resources  | Human resources Partnership with experts City data Customer relationship management tool | Human resources (1FTE) Partnerships with experts Digital platform Various tools/software that help in the planning for the renovation process | Human resources (10 FTE) Online quality platform Physical office Customer relationship management tool | Human resources Customer relationship management tool | Human resources (1 FTE) Physical office |
| Key partners  | Private and public entities and individuals, including: The municipality of the city Architectural firms Lawyers and experts | Private and public entities and individuals, including: Architectural firms Engineering firms Municipalities Lawyers and experts | Local area renewal offices Quality platform offering all professionals and companies that could do the renovation concept and work | HOA board members, Condominium managers, The City National climate agency Lawyers and experts (e.g. technical experts) | HOA board members and co-owners, Policy actors Local and regional authorities The city Energy House Property managers Other mediators/facilitators Technical and energy actors Architects, Planning & construction parties Energy Coaches, Heat grid operator Financial actors like banks and Insurance companies Educational institutes |
| Cost structure  | Costs are allocated for: Salaries Energy advisors Digital tools Financial support (FB1, FB5) | Costs are allocated for: Salaries Insurance & Taxes Travel expenses Office space rent Website maintenance Investments/funding | Costs are allocated for: Salaries Travel costs | Costs are allocated for: Salaries Communication expenses Management of customer relationships | Costs are allocated for: Salaries Activities Activating the demand & supply side Development cost |

Table III: The key differences among the 14 BMs according to the 9 building blocks (Continued)






| Building block | Business models | | | | |
|--|---|---|--|---|--|
| | BM6 | BM7 | BM8 | BM9 | BM10 |
| Brief description | Private organization | Private organization | Municipality of a larger-sized city | Municipality of a larger-sized city | Municipality of a larger-sized city |
| Customer segments  | HOAs Mainly apartment buildings with +50 apartments | HOAs Mainly post-war buildings Condominium managers (FB6) | Homeowners HOAs in specific areas in the city due to energy poverty Large condominiums | Homeowners HOAs, Vulnerable groups Dwellings over 20 years old Condominium managers (FB6) | Homeowners HOAs Condominium managers (FB6) |
| Value proposition  | Managing the whole process of renovation in respect to improvement of the shell and energy usage integrated with the 20/30 year Multi annual maintenance plan (MAMP) (TB1, FB7) High-quality standards (TB4) Providing topping-up as one solution to finance the renovation (FB1, FB3, FB5) | Providing standardized topping-up solutions to finance the renovation (FB1, FB3, FB5, TB2) Concept development (TB1, TB6) Providing Consultation to HOAs (SB1, SB2), Project management and assistance to HOAs during the whole renovation process (LB4, LB7, TB1, TB6) Legal advice & management (LB1) Governmental funds advise (FB2) | Enhancing the liveability of neighbourhoods Reducing energy poverty by providing extra subsidies for vulnerable groups (FB1, FB3) Providing HOAs with technical support (TB1) tailored advice (SB2), support for financial planning (FB2), and subsidies for feasibility studies (FB2, FB5) | Provision of tailored IHRS for HOAs Providing HOAs with the technical support to develop and implement a masterplan for energy renovation (SB2, TB1, LB6) Provision of neutral advisory service (SB4) | Provision of tailored IHRS for HOAs Providing HOAs with practical and technical support (TB1) Connecting HOAs to have block renovations (LB6) Provision of neutral advisory service (SB4) |
| Channels  | Some owners contact the IHRS provider as a private organization with a well-known name in the market Social media, Website Participation in events (SB2) Through previous clients | Website Webinars (SB2) Promotional videos (SB2) Bootcamps (SB2) | Advice and support through city-run websites, webinars, meetings, courses, and neighborhood-oriented approaches (SB2) Collaboration with local councils (LB7) | Organizing events for HOAs (SB2) and CMs (FB6) Networking with HOAs & experts through municipal events (SB2) Sharing information on the website, webinars & conferences, Promotional videos (SB2) | Social media Events Website Municipalities papers (SB2) Condominium manager's contact details (FB6) |
| Customer relationships  | Customer relationship is established through: Building trust Transparency Quality of work | Customer relationship is established through: Neutral and transparent advice (SB4) Personal service tailored to the HOA situation Solution-focused co-creation | Customer relationship is established through: Direct involvement in the various phases of the renovation process (SB4) Transparently communicating with homeowners (SB4) | Customer relationship is established through: Transparently communicating with homeowners (SB4), Emphasizing solution-focused co-creation Facilitating tailored renovation solutions for each HOAs (TB1, TB3) | Customer relationship is established through: Transparently communicating with homeowners (SB4) Participating in the HOAs meetings (SB1, LB1) |
| Revenue streams  | Revenues are generated through investment decisions made at various stages of the renovation process | Percentage of the total cost of the renovation. With the retainer fee option. | Revenues are generated through Grants obtained from the city and the EU | Revenues are generated through Grants obtained from the city HOAs that subscribe to the masterplan approach of the provider and investment decisions | Revenues are generated through Grants obtained from the city and the EU. Upgrading the housing label/quality, Which increases the property value (WOZ) and more taxes would be paid. |

Table IV: The key differences among the 14 BMs according to the 9 building blocks (Continued)














| Building block | BM6 | BM7 | BM8 | BM9 | BM10 |
|--|---|--|---|--|--|
| Brief description | Private organization | Private organization | Municipality of a larger-sized city | Municipality of a larger-sized city | Municipality of a larger-sized city |
| Key activities  | Developing reports for several renovation scenarios including MAMP and qualitative/financial solutions (FB7, FB3, FB2, TB6, TB1, TB3, TB4) Streamlining the decision making process of HOAs for implementing solutions (SB1, SB2, LB1) Assisting HOAs in applying for loans and subsidies (FB2,FB5, LB2) Giving lectures at events (SB2) | Organizing Bootcamps in a scalable way using the company platform Organizing meetings with HOAs (SB2) Creation of comparative financial reports (FB5) | Conducting feasibility studies, providing tailored advice and financial assistance, managing neighbourhood-oriented approaches, and facilitating community involvement in planning and decision-making processes (SB1). | Developing the masterplan for energy renovations (TB1, TB3) Training HOAs and condominium managers on the benefits of energy renovations (SB2), Assisting HOAs in applying for loans and subsidies (FB2, FB5) Managing digital tools | Providing tailored advice and financial assistance (FB2, FB5) Training materials for condominium managers (SB2, FB6) Presenting reports for HOAs (SB2) Moderate discussions of HOAs (SB1) |
| Key resources  | Human resources (2FTE + 1 external office manager) Partnership with experts | Human resources (10 FTE) Database (LB7) Digital Platform and academy | Human resources (6FTE) strategic project managers, policy advisors, communication specialists, and project assistants Financial resources for subsidies and feasibility studies | Human resources (2FTE) Renovation coaching by the local government Customer relationship management tool | Human resources (3FTE) Physical office (OSS) City data |
| Key partners  | Quality platform offering all professionals and companies that could do the renovation concept and work Architectural firms Engineering firms Lawyers and experts Ecological expert | Local and national governments Various experts and companies offering renovation solutions and quotations Lawyers notaries Advisors Architecture firms Brokers Construction companies | Housing corporations, local councils, financial advisors, architects, and other stakeholders | Condominium managers Architectural firms Engineering firms Governments Lawyers and experts (e.g. financial experts) | Energy advisors Energy Renovation experts Housing corporations Architecture firms |
| Cost structure  | Costs are allocated for: Salaries Insurance & Taxes Travel expenses Office space rent Website maintenance Investments/funding | Costs are allocated for: Salaries, advisories, marketing and academy creation, overhead | Costs are allocated for: Salaries Costs associated with organizing informational events and producing materials Collaborating with external partners | Costs are allocated for: Salaries Investment in time providing financial training and possibilities of the co-owners | Costs are allocated for: Salaries OSS physical office Advertisements informational events and producing materials |

Table V: The key differences among the 14 BMs according to the 9 building blocks (Continued)

| Building block | Business models | | | |
|--|--|---|--|--|
| | BM11 | BM12 | BM13 | BM14 |
| Brief description | Private organization | Private organization | Municipality of a larger-sized city | Municipality of a larger-sized city |
| Customer segments  | HOAs Homeowners Landlord, tenants Condominium managers (FB6) | HOAs Homeowners | Homeowners Small Condominiums | Homeowners Vulnerable groups |
| Value proposition  | The value propositions include All-inclusive energy retrofits for homes. Personalized financing solutions for energy retrofits (FB1,FB2,FB3) Technical specifications (quality assurance) (TB1,TB4) Providing Prefinance subsidies (FB1,FB5,FB3,LB7) | Deep renovation of private homes and tertiary buildings Integrate the complexity of a renovation project to the benefit of the owners | Assistance and support for home renovation projects in the city. Preserve and improve the quality of life and the environment of residents. Provides support to homeowners on the priorities of the different phases of the renovation (SB1) and technical (TB1,TB3, TB6), financial (FB5), and administrative support (LB4,LB7). | The city aims to address energy poverty among middle and working-class households through a BM that emphasizes a straightforward and accessible renovation process. Their approach focuses on improving comfort by reducing energy losses, enhancing air quality, and overall well-being, leading to lower energy bills and increased property value. |
| Channels  | Communication channels encompass online services, 1-hour technical telephone communication, a website and a physical OSS (SB2). | Energy information centres Local authorities Website (SB2) Local press Contractors | Online services, social media, telephone communication, website and a physical OSS (SB2). | Offline and online channels for communication, including home visits, campaigns, neighborhood meetings, websites, and social media (SB2). |
| Customer relationships  | Customer relationship is established through: neutral and transparent advice to homeowners (SB4). And home visits for energy audits (TB5). | Customer relationship is established through: Personalised support offer (SB4, LB7) | Customer relationship is established through: Neutral and transparent advice to homeowners (SB4) in diverse forms: home visits, document analysis, office appointments | Customer relationship is established through: dedicated personal assistance, community engagement (SB2), and collective procurement initiatives. Establish trust and provide assistance tailored to individual needs (SB4). |
| Revenue streams  | Revenues are generated through investment decisions made at various stages of the renovation process. Revenues are from and single-family houses. Public funds from the regional government. | Revenues are generated through Sales of services, Public funding Revenues from energy efficiency certificates | 100% funded by the government and offers all services free of charge (FB1, FB5) | Short-term revenue is generated through EU funding, while long-term sources include national, provincial, and municipal funding, EU facilities, revenue from solar roof projects, and premium services such as tailored solutions, financial advice, and Community Energy Service Company. |
| Key activities  | Technical calls and home visits for energy audit. Providing support to homeowners in each phase of the customer journey (LB1, LB7, SB1, SB2, FB4). Help homeowners apply for subsidies and help with financial calculations (LB7,FB2) On-site job management (TB4) Preparing Technical reports (TB2,TB3,TB6) | Provide Energy audit services (TB5) Masterplan (TB1, TB3, TB6, LB4) Financial planning (FB5, FB2, LB4, LB7) Tailored support for co-owners (SB1, FB4, LB7) Preparing applications for grants and arranging financing for the renovation project (FB2, LB2, LB4, LB7) Site acceptance, support for new equipment commissioning and monitoring of actual performance (TB2, TB4, TB5, FB7) | Answering any questions related to the use and renovation of private homes (SB2). Homegrade provides also in-depth coaching for homeowners (SB2). Homegrade also works in close collaboration organizing several workshops, webinars, and meetings (SB2) with various stakeholders and target groups (TB1). Participation in pilot projects, initiatives, and working groups. Helping homeowners in applying for grants (FB1, FB2, FB5). | Activities involve social, technical (TB1, TB3, TB4, TB6), and administrative aspects (SB1). These include developing partnerships, promoting citizen participation (SB2, SB1), conducting home visits and energy diagnoses (TB6), providing personal renovation measures (TB4), managing contractor relationships, and offering administrative support (LB4). |
| Key resources  | Physical office 45 FTE | Physical office 15 FTE | Physical office, CRM tools, human resources consisting of more than 40 experts (LB7), and informational materials such as flyers, brochures, website, publications and booklets. | Physical and online offices, brand credibility, a list of contractors, supporting tools, and customer tools such as energy efficiency factsheets and the IkWoon application. |
| Key partners  | SMEs Architects Engineers Banks Local authorities | Local authorities Contractors Banks Insurance companies | SMEs, Architects Local authorities and associative sections was created to better coordinate the multitude of players on the supply side (LB7). | Local authorities Contractors, installers, Architects (LB7). These partnerships contribute to credibility, execution of renovation work, additional revenue streams |
| Cost structure  | Costs are mainly allocated to salaries and activities to carry out the renovation works. | Staff. Services provided: audits, project owner support, project management, and even renovation works Operating costs. | The main cost is associated with the salaries of experts employed by the OSS and an interactive website that has been recently relaunched. | Costs are allocated to personnel, physical office (not initially), web domain, marketing and communication actions, and ICT tools. |