

STIMULATING HOMEOWNER ENERGY-SAVING BEHAVIOUR THROUGH LOCAL AUTHORITIES' ACTIONS

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Interreg 
2 Seas Mers Zeeën

Triple-A

Awareness + Access + Adoption

European Regional Development Fund

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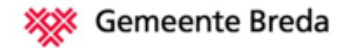
CONTENTS

- 1. Introduction**
- 2. Awareness and easy access**
- 3. Strategy for engagement of local authorities**
- 4. Conclusions**

Introduction



project partners...



with financial support of...



Goals in home renovation

1. Retrofitting existing houses into highly energy-efficient buildings
2. Increasing the renovation rate to 3% by 2030
3. Promoting equal access to financial aid while ensuring affordability

Role of local authorities

1. A trusted mediating and quality-assuring facilitator
2. Localised / decentralised approach to increase renovation rate
3. Implementing policies for household energy efficiency improvements
on the local level

Challenges for local authorities

1. Traditional approach is often organized centrally and with a top-down paternalistic approach: energy performance certificates, financial incentives, subsidies, tax credits (Wilson et al., 2015)
2. Realising more involvement of third parties to public procurement, with more cooperation

Research question

How can local authorities better stimulate homeowners to adopt low-carbon technologies?

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Local authorities' behaviour change

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graph TD; A[Local authorities' behaviour change] --> B[Homeowners' behaviour change]
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Homeowners' behaviour change

Awareness and easy access

1

Modular
web portals

2

Pop-up
centres

3

Home
Energy
Monitoring
Systems

4

Demonstration
exemplars

Awareness and easy access

1

Modular
web portals

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Demonstration
exemplars

Strategy for engagement of local authorities

1. Developing co-creation and collaboration
2. Taking into account the homeowner renovation journey
3. Developing communication and organization skills
4. Sustaining the actions which lead to homeowner adoption

Strategy for engagement of local authorities

1. Developing co-creation and collaboration

Public actors	Civic actors	Private actors
National authorities	Local ambassadors	SMEs/Suppliers
Local authorities	Neighbourhood committees	Local contractors
Public welfare	Schools	Energy advisors
Energy agencies	Students of a technical school	Installers
Social affairs		Non-private actors
Grid operator		Energy-net manager
Other city departments		Communication experts

1

Modular web portals

2

Pop-up centres

Strategy for engagement of local authorities

2. Taking into account the homeowner renovation journey

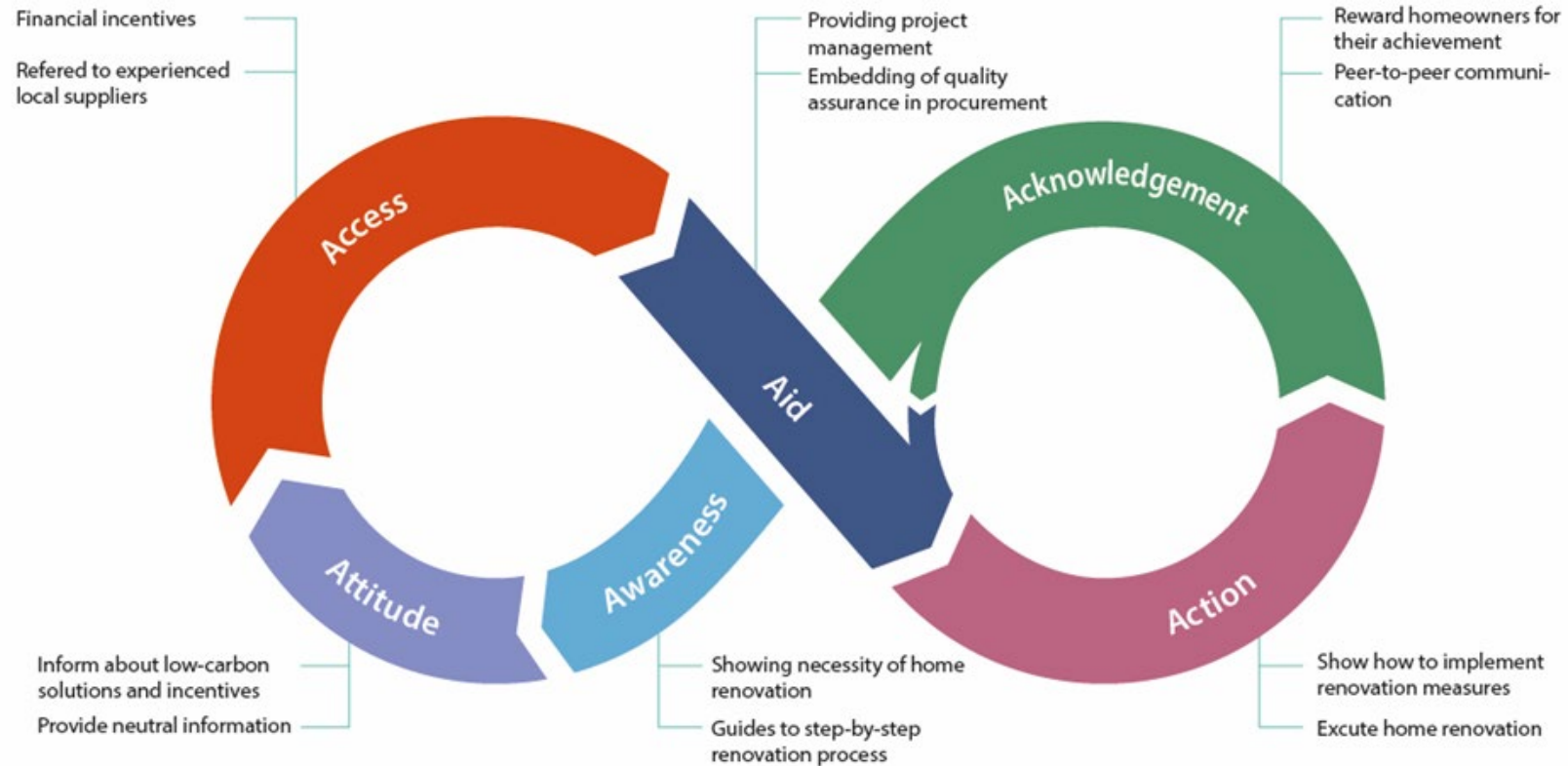


Figure 1 Homeowner renovation journey model for the inventory of supporting local authority actions (M.Kwon & E.Mlecnik, 2021)

Strategy for engagement of local authorities

3. Developing communication and organization skills

Public actors	Civic actors	Private actors
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Other city departments		Communication experts

Strategy for engagement of local authorities

3. Developing communication and organization skills



Breda



Antwerpen



Mechelen



Kent



Ostend



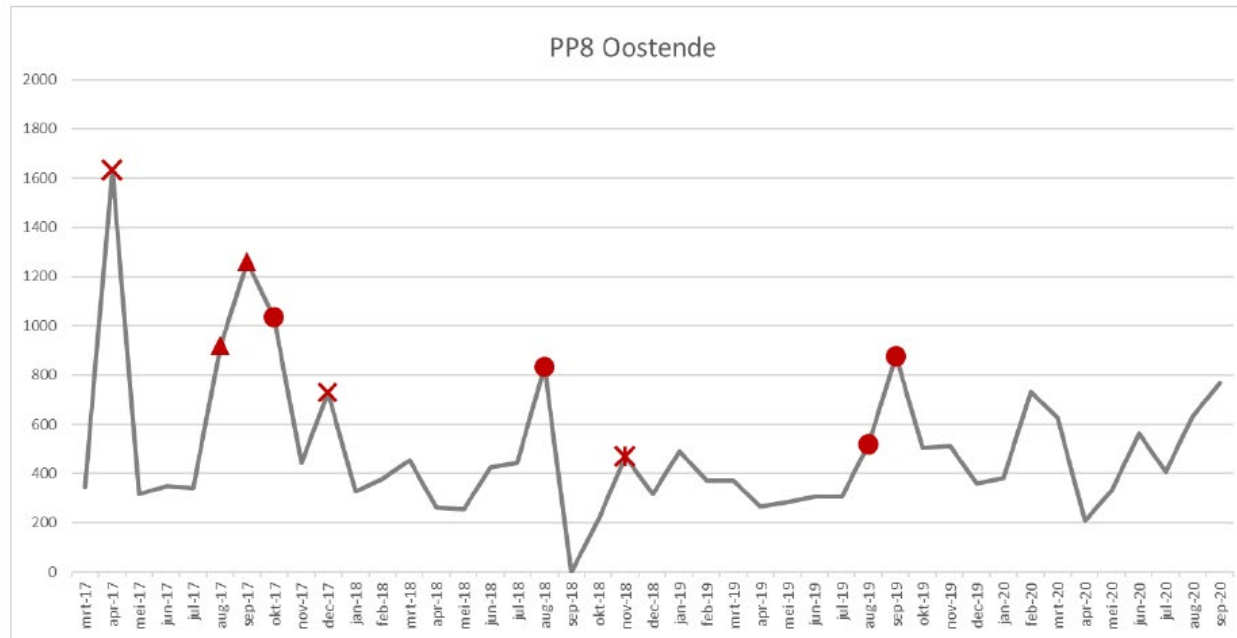
Rotterdam



Picardie

Strategy for engagement of local authorities

4. Sustaining the actions which lead to homeowner adoption



- Group purchase organized by the LA
- ✕ Newsletters, newspapers sent by the LA
- AdWords campaign initiated by the LA
- ▲ Pop-up consultation service offered by the LA during a short period
- Events organized by the LA
- * Launch of web modules by the LA

Figure 2 Number of unique visitors for web portal

Strategy for engagement of local authorities

4. Sustaining the actions which lead to homeowner adoption

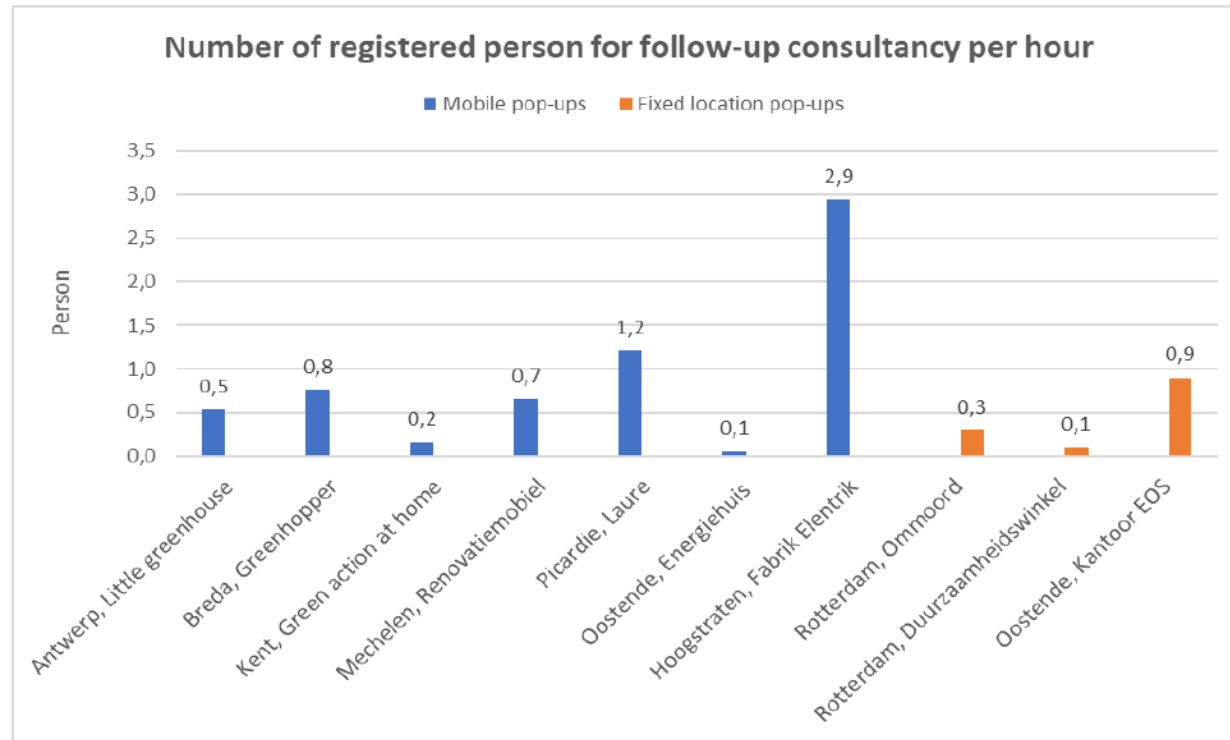


Figure 3 Number of registered person for follow-up consultancy per hour

No. pop – up referral per hour

$$= \frac{\text{No. Amount of visitors who indicated to have plans for investments}}{\text{Opening hours}}$$

Strategy for engagement of local authorities

4. Sustaining the actions which lead to homeowner adoption

<p>8. Key partners</p> <p>Defines who will contribute to the pop-up development and promotion without being directly involved in providing the daily services</p>	<p>6. Key activities</p> <p>Defines what services will be delivered in the pop-up</p>	<p>2. Customer Values</p> <p>Defines what added value you bring with the pop-up to the customer segment</p>	<p>4. Customer Relationships</p> <p>Defines how you will keep the relation with the customer ongoing after visit</p>	<p>1. Customer Segment</p> <p>Defines the expected customers for the pop-up</p>
	<p>7. Key resources</p> <p>Defines who should daily deliver the services and with what means</p>		<p>3. Customer Channels</p> <p>Defines how you will inform the customer about the pop-up</p>	
<p>9. Cost structure</p> <p>Estimates the expected yearly costs to run the pop-up and its service</p>		<p>5. Revenue Stream</p> <p>Defines how the pop-up will sustain its costs in the future, preferentially create its own revenues</p>		

FIGURE 4 BUSINESS DEVELOPMENT MODEL (BASED ON OSTERWALDER & PIGNEUR, 2010; MEIJER ET AL., 2018A; MEIJER ET AL., 2018B)

Conclusions

- Cooperation with citizen organisations, other local authorities and umbrella organisations during development allows better targeting of audiences.
- Personalised coaching and information (e.g., thermographic photos) can attract people to home renovation
- Combining virtual consultancy with physical consultancy increases the engagement of homeowners for home renovation.
- Keep sustaining actions and evaluating the impact internally.
- Keep the homeowner renovation journey in mind, link with relevant stages of this journey



Thank you

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Q & A