

Triple-A

Awareness + Access = Adoption

European Regional Development Fund

Encouraging energy efficient home renovations



www.triple-a-interreg.eu





Do you want to lower the carbon footprint in your city? Are you as a local authority or other organisation convinced that home renovations can play an important role in this matter? Do you want ideas on how to foster sustainable renovations among your inhabitants?

Triple-A might get you on track!

Triple-A is a European funded project (Interreg-2-Seas programme) that aims to help local authorities who are seeking to support homeowners to reduce emissions in their homes. As such Triple-A contributes to achieving the EU 2020 targets (20% cut in greenhouse gas emissions, 20% of EU energy from renewables, 20% improvement in energy efficiency). Triple-A started in 2017 and will be finished in 2020.

Triple-A helps local authorities by

- Sharing best practices
- Offering tools to plan own retrofit projects

Who's behind it?

7 Local authorities from 4 countries:

- Belgium: Antwerpen, Mechelen and EOS Oostende
- France: PSEE Picardie
- The Netherlands: Breda and Rotterdam
- The United Kingdom: Kent County Council

2 Universities:

- TU Delft (project coordinator)
- Ghent University

1 Belgian utility provider:

- Fluvius (Eandis)

Way of working?

Triple-A refers to promoting better **A**wareness of, **A**ccess to, and **A**doption of low-carbon technologies among households. To reach these goals, 4 actions will be set up:

- 1) Enhancing web communication
- 2) Testing home energy monitoring systems
- 3) Setting up pop-up consultancy centres
- 4) Installing real-life demos of technologies for energy efficient retrofitting

For each action, local authorities together with wider project partners and stakeholders (including the energy supply side), will go through the process of:

- Scoping (market research and benchmarking)
- Designing and testing
- Evaluating
- Sustaining (ensuring continuity of all actions by offering guidelines to other local authorities on how to implement them)

What these actions are, how we deal with them in the project, etc., is explained on the next pages and visualised in the figure on the facing page.

Guidelines for local authorities

The project will deliver practical guidelines on how to create awareness on, access to and adoption of low-carbon technologies among homeowners when planning to renovate their homes. These instruments will not only be useful for local authorities, but also for national governments, the European Commission and other interested stakeholders (supply side, financial organisations, etc.).

The guidelines will:

- Offer useful advice on how to implement the above actions into other housing retrofit projects.
- Convey which barriers and good practices the local authorities encountered in using the method.
- Contain insights from behavioural studies on engaging residents to make home improvements by using low-carbon technologies.

Methodology & expected output

- Action 1
- Action 2
- Action 3
- Action 4

Increasing Awareness

Easy Access

Adoption of low-carbon technologies



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

Triple-A focuses on the implementation of four interlinked actions:

Action 1: Improving web portals of local authorities

What?

In Triple-A, existing web portals of local authorities on sustainable energy will be optimised. They offer information to their citizens about how to reduce CO₂ emissions in their area, with special attention to energy efficient home renovations.

Aim?

Increase **awareness** of and **easy access** to low-carbon technologies.



How?

Existing web portals of local authorities will be reviewed and optimised. Web portals offer great advantages to raise awareness among homeowners: they are available 24/7, easy adaptable, offer a wide outreach, etc. By developing and integrating new web functionalities, the current web portals will become more user-friendly. They will allow quick scans to assess which technologies best suit with the homeowners' needs and resources. For instance, Ghent University will develop a cost and energy savings calculation method as one of the functionalities.

The web portals will support and reinforce the other three actions of the Triple-A method: they will be used in the pop-up centres, promote the use of home energy monitoring systems and connect with real-life demo exemplars.

Action 2: Introducing home energy monitoring systems

What?

Home energy monitoring systems are also called HEMS. In Triple-A these are simple systems that give easy insight into and control over a household's energy consumption.



Aim?

Increase **awareness** and stimulate **adoption** of low-carbon technologies.

How?

HEMS will be selected and installed in different households who are part of the demo exemplars (action 4). They will install low-carbon technologies in their house and will be asked to allow access to the data from their HEMS. This way the effects of low-carbon technologies on CO₂ reduction can be evaluated and shared with all stakeholders.

HEMS will further be promoted through the web portals of local authorities and in the pop-up centres.

Action 3: Setting up consultancy pop-up centres

What?

Pop-up centres are locations where homeowners can become acquainted with existing low-carbon technologies. In the pop-ups they can get all the information they need during their renovation journey.

Aim?

Increase **awareness** of and **easy access** to low-carbon technologies.

How?

Three different types of information pop-up centre models will be developed and tested in cooperation with other stakeholders. Suppliers (including local small and medium-sized enterprises) can use these centres for displaying their technologies and offering consultancy. Neutral advice will be guaranteed.

1. Short term, mobile pop-up centres, will stay for about 1 week at a certain location in targeted neighbourhoods. It might be an example of a sustainable building itself with mobile information desks or stands and easy to (dis)assemble constructions. This model will be developed and tested by EOS Oostende, Mechelen, Breda and Kent.

2. Fixed, long term pop-up centres will be installed for maximum 1 to 2 years in existing public service centres (libraries, cultural centres, schools, community buildings) or in temporary vacant buildings. This model will be developed and tested by Rotterdam and Antwerpen (in close cooperation with Picardie and EOS Oostende).

3. Fixed short term pop-up centres are a mixture of model 1 and 2. They will be installed for maximum 1 week in existing public locations (e.g. neighbourhood centre) or in private locations (e.g. demo houses). This model will be developed and tested by Antwerpen (in close cooperation with Rot-

terdam and EOS Oostende) and Picardie (in close cooperation with Kent).

The big advantage of pop-up centres is that they can reach an audience that is difficult to reach through the usual channels (permanent office, website, etc.). Pop-ups are easily accessible because they come to the homeowners instead of the other way around. They also show the different options in a visual way and offer tailor-made advice. Pop-up centres will actively promote all other actions.



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Action 4: Showing real-life demo exemplars for energy efficient retrofitting

What?

Low-carbon technologies will be installed in different houses. They will be monitored through HEMS (action 2) and demonstrated in real-life to other homeowners during open home events.

Aim?

Increase **awareness** and **adoption** of low-carbon technologies.

How?

Real-life demonstrations support future investments in low-carbon technologies by homeowners, since they prove in a comprehensive way it actually works.



To suit variable needs in each partner region, 4 demonstration models will be tested:

- 1. Partial retrofit, utilising innovative and/or new technologies:** E.g. battery storage & PV will be installed in selected houses on individual level.
Where? Kent, Picardie, Rotterdam
- 2. Whole house and/or nearly zero carbon retrofit:** Selected houses will be retrofitted at once on individual level. This may include passive house insulation standards or the installation of heat pumps and PV.
Where? Antwerpen, Breda, Mechelen, Rotterdam
- 3. Collective retrofit:** By means of group purchases, selected houses will execute the same kind of retrofitting against the same conditions. The focus is on roof and wall insulation, although replacement of heating systems can also occur.
Where? EOS Oostende, Picardie, Rotterdam
- 4. Retrofit in stages:** creating a long term plan for the whole property.
Where? Rotterdam, Breda

Supporters

28 organisations already support the Triple-A project. They will be involved in the development of the Triple-A method, and will make use of the project results. The supporters represent a mix of local and regional authorities, sector federations, innovation centres and consumer organisations from Belgium, France, The Netherlands and The United Kingdom. New members will be listed on www.triple-a-interreg.eu/observer-partners.



Triple-A is still looking for new supporters to further develop solid relationships with. Become one of those key actors! Contact us via e-mail: e.mlecnik@tudelft.nl.

For whom?

Mainly for

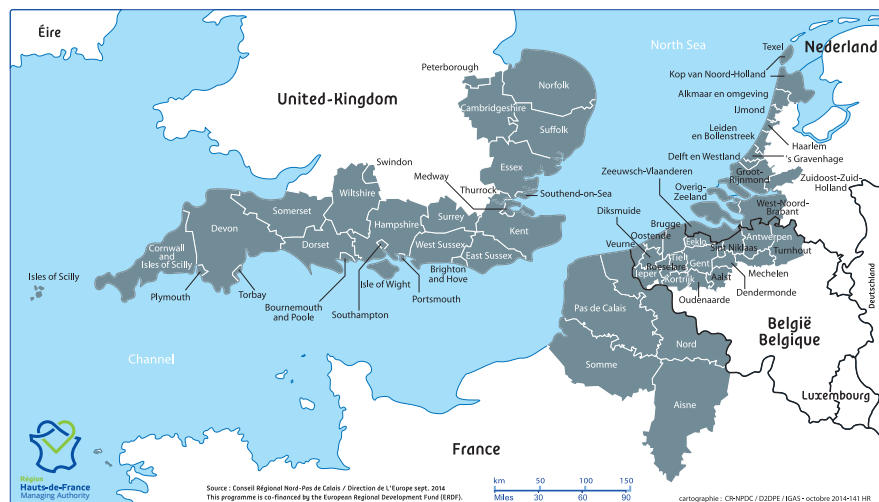
- Local and regional public authorities
- Organisations that work for local and regional public authorities

But also for

- Supply side (contractors, technology developers & suppliers)
- Regional energy multipliers (energy consultants, network organisations)
- Consumer/resident organisations
- Financial partners (banks, energy service companies, energy cooperation's, utilities)

Conditions

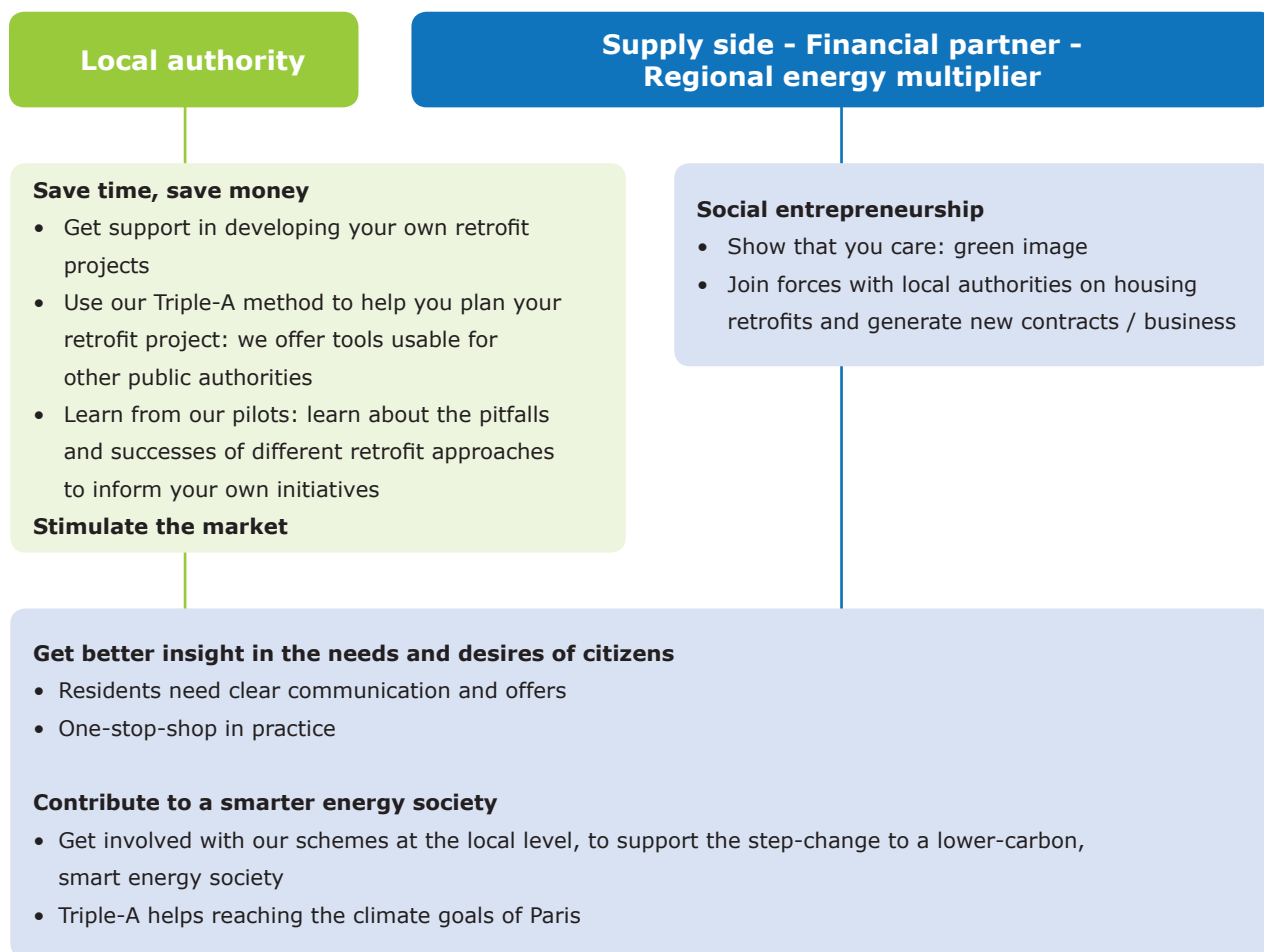
- You are located in Europe, preferably in the 2 Seas region.
- This is the target area of the 2 Seas Crossborder Cooperation Programme that finances the Triple-A project.



What can you expect?

- We listen to the ambitions of your organisation as local authority or other stakeholder
- We introduce you to local authorities with similar ambitions with regard to decreasing carbon emissions in single-family houses
- We invite you to local scoping and designing workshops
- We share knowledge and best practice to support your own energy efficient retrofitting activities
- We communicate about the initiatives of your local authority or organisation

Why should you participate?



More information?

For general Triple-A questions or communication related matters:

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For questions related to Triple-A actions or possibilities in your region, you may also contact your regional contact point. You can find their contact details on the back cover.



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