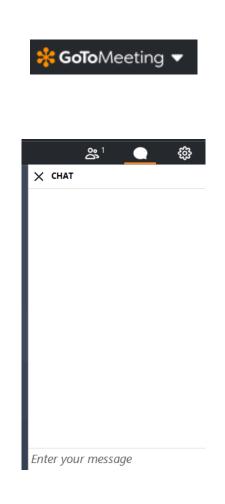


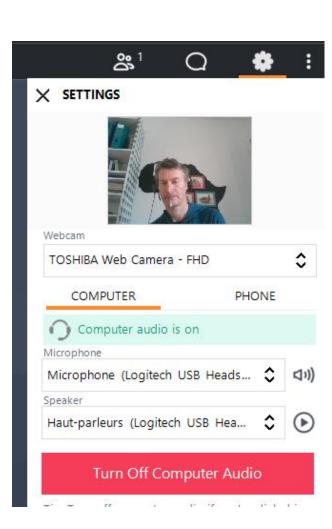
ACE-Retrofitting Users Club

Digital conference

March 26th 2020, 9:30-12:00

- Please deactivate your microphone and webcams
- If you need to take a small breather - please do so - we are recording the meeting
- Write your question/comment on the chat box
- We'll collect them for the Q&A session after the presentations







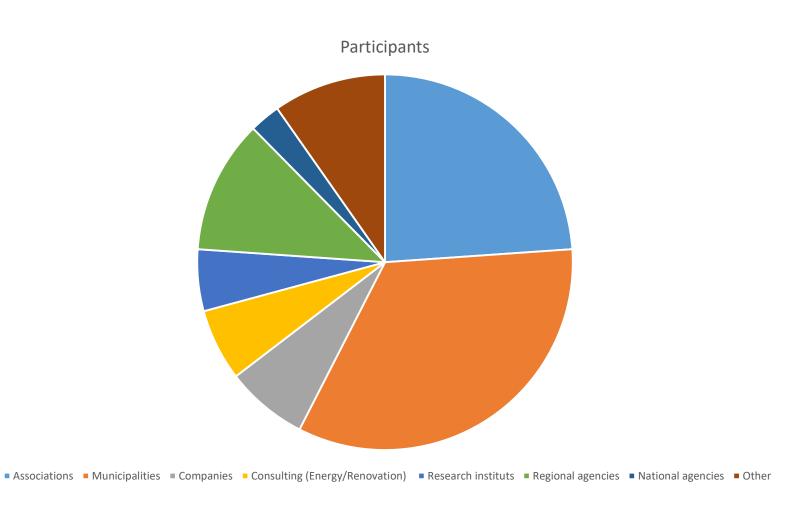
ACE-Retrofitting Users Club

Digital conference March 26th 2020, 9:30-12:00





Who is who?





Agenda

9:30-10:00 Condominiums - the big building challenge in Europe

10:00-11:15 When 6 cities take action to renovate their condominiums

11:15-12:30 Brussels-Capital Region: mobilising local players around condominium retrofits



Large scale European statistics and focus on condominiums

- Recently, we reached the significant level of 50% of the EU population living in cities
- By 2050, this rate is expected to reach 80%
- In the main EU cities, the collective housing forms are currently hosting about 80% of urban households
- The land-use planning trends and regulations are encouraging multi-storey buildings as the urban living standard
- It is compulsory to build-up a European housing database taking into account condominiums as a specific building type



Accelerating energy retrofitting in condominiums (flats, tenements, multi-storey blocks)



www.nweurope.eu/ace-retrofitting



Energy retrofitting in condominiums: A common challenge for EU countries

A complex and unattractive market for building professionals

Long decisionmaking process to develop a renovation project



Many buildings constructed before 1980, with low energy efficiency

Financing engineering of a renovation project is complex

A key sector to reach cities' energy and climate targets



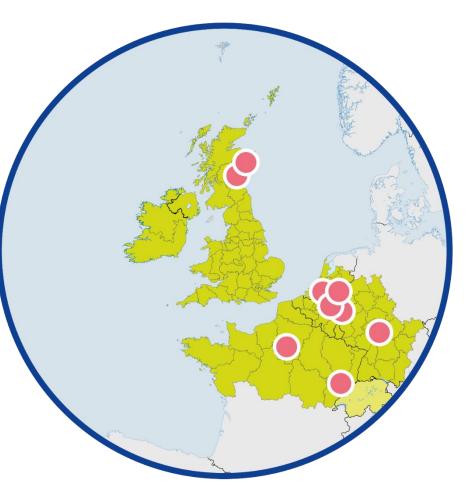
Project partners

6 areas represented by:

- Energy House Antwerp (Belgium)
- Agence Parisienne du Climat (France)
- City of Liège (Belgium)
- Aberdeen City Council (United Kingdom)
- Frankfurt Energy Agency (Germany)
- City of Maastricht (the Netherlands)

3 organisations:

- Energy Cities, the European network of local authorities in energy transition (leader)
- University of Maastricht (the Netherlands)
- Changeworks (United Kingdom)





Key ACE resources...

The step-by-step tool

It takes some courage for condominium co-owners to plan or carry out an energy retrofitting in their building.

The ACE step-by-step tool is there to make things easier.

The guide is divided into three big phases: "First steps", "Taking-off" and "The real thing". All together, the guide counts 17 helpful items for soft and hard measures:

14 documents are ready-to-use

3 documents are designed in a way as to be adapted by a public body, esp. regarding legal and financial issues, according to the local and national context.

https://www.nweurope.eu/projects/projectsearch/accelerating-condominium-energy-retrofitting-aceretrofitting/#tab-4 Step-by-Step tool in English
♠ Step-by-step tool auf Deutsch
♠ Step-by-Step Tool en nederlands
♠ Outil step-by-step en français



Key documents produced so far...

Your guide to boost condominium retrofits

Through this guide, partners from the EU-funded ACE Retrofitting project share their learnings on how to act as facilitators between co-owners and building experts. If you are working in a public (local or regional) authority or in an energy agency, the insights given will help you improve your work with condominiums.

https://www.nweurope.eu/projects/projec t-search/accelerating-condominiumenergy-retrofitting-ace-retrofitting/#tab-5



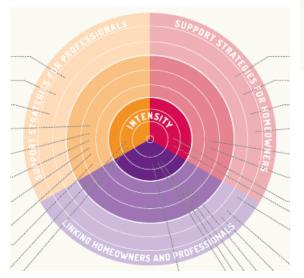


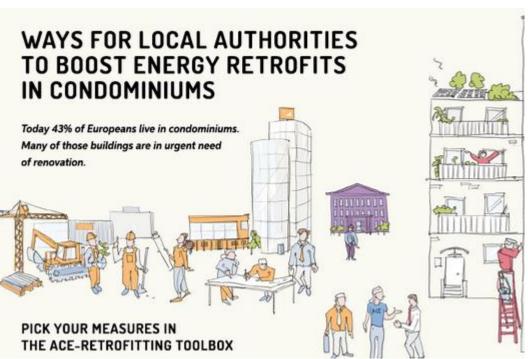
Key documents produced so far...

Infographics

SUPPORT STRATEGIES THAT HAVE BEEN SUCCESSFULLY TESTED IN 6 CITIES

PICK YOUR MEASURES IN THE ACE-RETROFITTING TOOLBOX





https://www.nweurope.eu/projects/projectsearch/accelerating-condominium-energyretrofitting-ace-retrofitting/#tab-6



Key documents produced so far...

Case studies and videos



https://www.nweurope.eu/projects/project-search/accelerating-condominium-energy-retrofitting-ace-retrofitting/#tab-5



Before/After ACE retrofitting



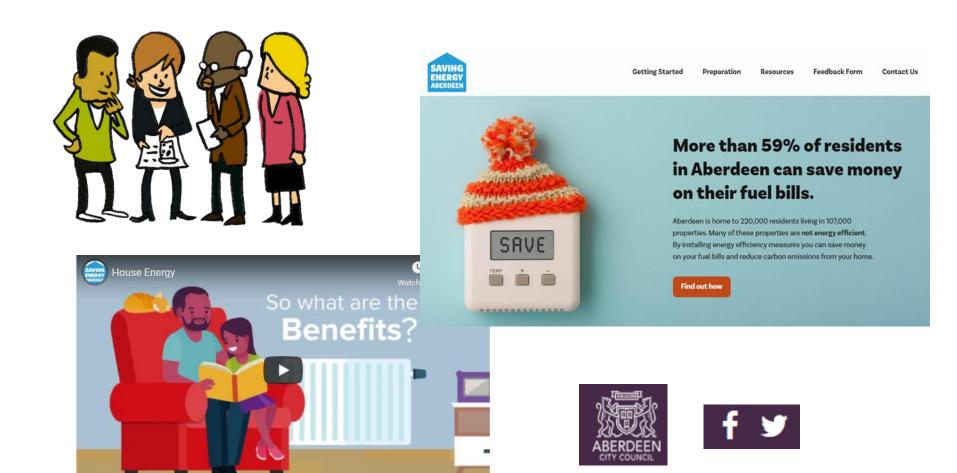


Aberdeen - Before





Aberdeen - After

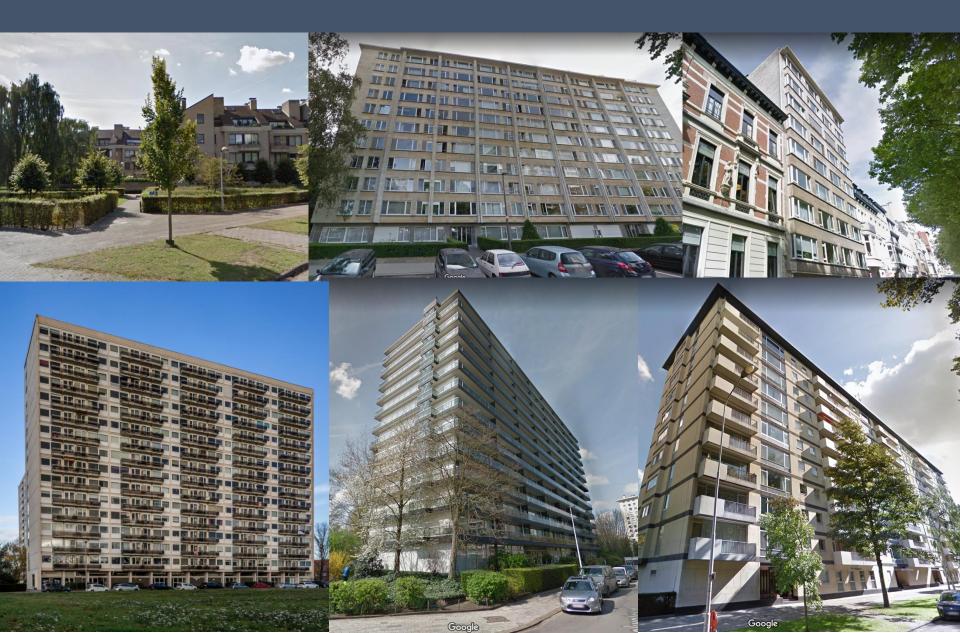




City of Antwerp
71% of dwellings in privately owned condominiums



The Masterplan approach for large appartments



Platform & tools for demand & supply side



NIEUWSBERICHTEN | SHOWCASES | PARTNERS | WORD PARTNER | OVER ONS |









Eind jaren '60, begin jaren '70 schoten appartementsgebouwen in de rand van de Vlaamse centrumsteden als paddenstoelen uit de grond en veranderden op een paar jaar tijd de skyline van Antwerpen. Ondertussen zijn er heel wat gebouwen toe aan een grondige renovatie. De stad is partner in het Europese Interreg-NWE. Met

dit project wil Antwerpen de juridische, sociale en financiële knelpunten wegwerken die het renoveren van appartementsgebouwen vertragen.

Stad Antwerpen ondersteunt u graag

Renovatiecoaching en

premie voor

Is uw appartementsgebouw aan vernieuwing toe?

> Heeft u de nodige expertise om een



Meer informatie >

Gespecialiseerde aannemer of



Strategische partners

Abonneer als aannemer



Platinum en Gold Partners

Long term strategy: collaboration

Beleidsnota

ingediend door Zuhal Demir, Vlaams minister van Justitie en Handhaving, Omgeving, Energie en Toerisme

Energie 2019-2024

We gaan daarvoor de voorwaarden voor een energielening voor nieuwe eigenaars versoepelen en onderzoeken tegen uiterlijk september 2020 hiervoor o.a. volgende opties:

- Vermindering van de onroerende voorheffing van niet energiezuinige woningen na grondige energetische renovatie
- Verhoging van de energiepremies gekoppeld aan labelverbetering EPC voor nieuwe eigenaars.
- Ondersteuning van de opmaak van een masterplan BENOvatie dat Vereniging van Mede-Eigenaars (VME) en syndicus begeleidt bij de renovatie van grote appartementsgebouwen.
- Een publiek-privaat rollend fonds voor de renovatie van appartementen zodat de looptijd van VME-kredieten kan worden verlengd van 10 tot 30 jaar. Het voorzien in een overheidsgarantie kan daarbij een hefboom vormen voor het aantrekken van privaat kapitaal.

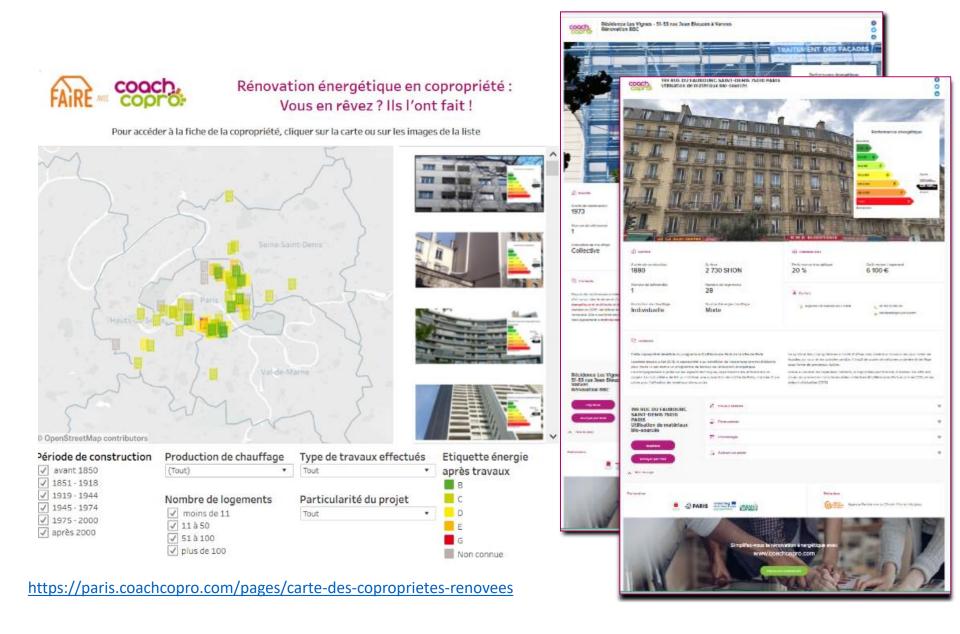


Before/Ater ACE retrofitting

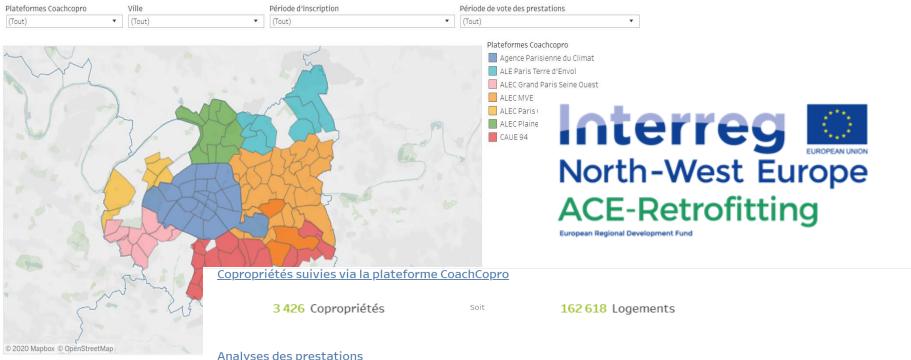


Paris Climate Agency

The map of renovated condominiums



Example: Observatory - CoachCopro





Les analyses ci-dessous donnent le nombtre de copropriétés et de logements associés ayant réalisé ou voté des prestations (audits, MOE, travaux). Pour distinguer le statut de prestations, vous pouvez utiliser le filtre ci-contre. Les filtres territoriaux sont également actifs.



Statut des prestations

En projet

✓ Réalisé ✓ Voté

Copropriétés: 673 Logements: 54 446

Audits

Montants: 4735 143 € TTC

Maitrises d'oeuvre

Copropriétés: 186 Logements: 14883

Montants: 9 708 417 € TTC

Travaux

Copropriétés: 271 Logements: 20 222

Montants: 170 500 722 € TTC

Analyses de la performance énergétique

Ces auelaues indicateurs donnent une tendance de la performance énergétique du parc de copropriétés rénovées inscrites sur CoachCopro. Ils sont calculés lors des audits énergétiques et des maitrises d'oeuvre, donc les valeurs sont théoriques (usages règlementaires).





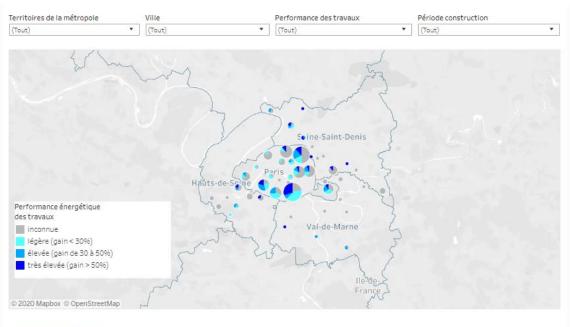
Consommation initiale moyenne

260,2 kWh/m²/an

Consommation projetée moyenne 152,7 kWh/m²/an

Projets BBC Rénovation (104 kWh/m²/an) 38

Projets Plan Climat Paris (80 kWh/m²/an)



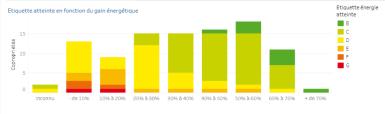




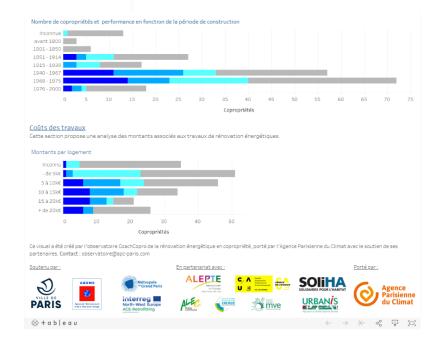
Performance énergétique des travaux

Cette rubrique analyse les étiquettes énergétiques projetées après travaux, et la performance atteinte en fonction de la période de construction des bâtiments. Des chiffres clés sont d'abord proposés.

	Copropriétés	Logements	Gain moyen en %
très élevée (gain > 50%)	30	2 639	59
élevée (gain de 30 à 50%)	36	3 336	40
légère (gain < 30%)	60	6 210	14
Inconnue	121	6 384	
Synthèse	247	18 569	32



rformance atteinte en fonction du





Frankfurt: Before/After ACE

- Improved understanding:
 - of the sector's relevance
 - of the target group
 - of condominium situation
 - of the municipalities fields of action
- Clearer knowledge of strategies and tools
- Awareness of the challenge ahead



Condominiums in Liège? A sad & dusty heritage from the XXth Century

















Poor parent / black sheep of the housing sector



- No consideration from authorities
- No contact point
- No specific knowledge of the sector
- No statistic data
- No public housing help
- No private banking financial offer
- No willingness to act
- No interest from the building companies

But a lot of problems:

- ✓ Aging / building & households
- ✓ Decrease of social status
- ✓ Hudge defaults in:
 - Safety
 - Salubrity
 - Energy Efficiency
 - ❖And more...



New sunny perspectives by 2050

















Condominium realities become highlighted



- New Regional and local authorities consideration / Strategy 2050 & Liège 2025
- New Local condominium Data Base and GIS special layer



New Online interactive Web Platform - https://www.reno-copro.liege.be/



New Walloon Housing Fund - 0% loan for Co-Owners Associations





- New Logical approach for work RoadMap 2050
- New free audit & RoadMap 2050 test phase view on ELENA



- New synergies with Trustees federation
 - New interest from architects, Chamber of Builders & Clusters of Enterprises



New perspectives of Local Energy Communities



Landscape has changed - definately



ace.retrofitting@liege.be



https://www.reno-copro.liege.be/





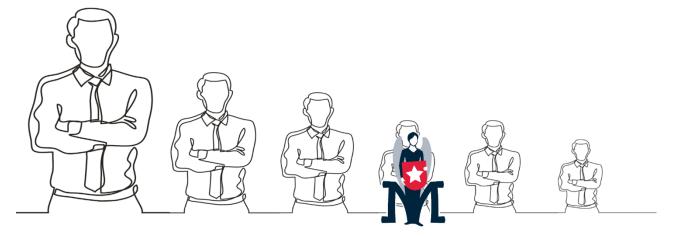


Before/After ACE retrofitting



Maastricht























VvE energiebalie Inspiratie

Advies



Terug

Gegevens project

Gemeente Maastricht

vve-balie@maastricht.nl

Projectmenu

VvE balie

Fase 1 - Verkennen

Leer uw gebouw beter kennen

Laat u inspireren door ervaringen van anderen

Is in uw VvE voldoende kennis en kunde aanwezig?

Zet uw VvE aan tot actie

Breng behoeftes in kaart

Fase 2 - Voorbereiden

Heeft u aanvullend advies nodig?

Hoe organiseren we dit project binnen de VvE?



Kennis

VvE energiebalie

Inspiratie

Advies







<u>Video</u>





ACE-Retrofitting Policy Recommendations



Energy Performance Certificates (EPCs) linked to minimum energy performance standards for whole buildings are required as a driver for whole building retrofit.



source: Synopel



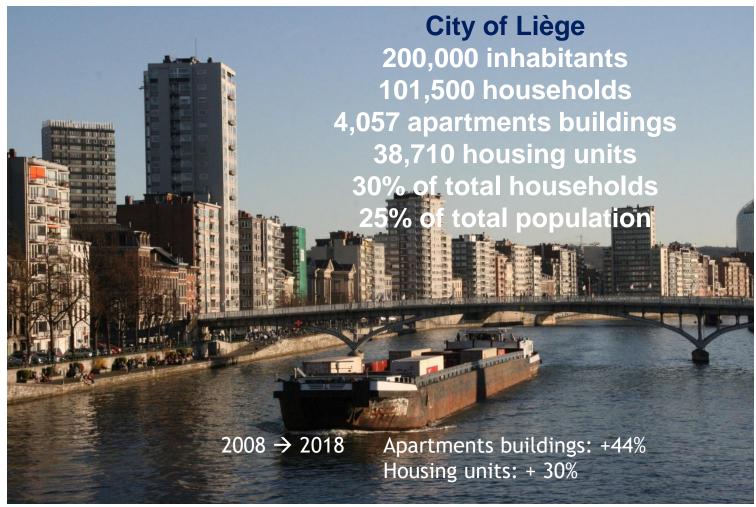
ACE-Retrofitting Policy Recommendations



EPC registers and databases with condominium specific data should be available and publicly accessible to meet the needs of city or regional actors developing and implementing condominium retrofit strategies.















City of Liège



Actual Condominiums
– 2019
1,724 Buildings <=>
Co-Owners
Associations

= 42% of total apartments buildings

Others: mono properties, public & private



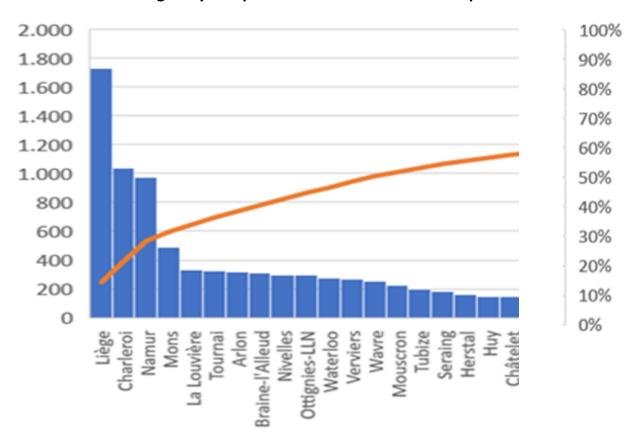






European Regional Development Fund

Liège City compared to other walloon municipalities





Centre Emile Bernheim







Level of Energy Performence Certificates (BEPC)





For Liège (May 2017):

32.000 BEP Certificates

Classes EFG = bad

- -48% / Apartments
- -81% / Houses

Classes BCD = medium

- -51% / Apartements
- -19% / Houses

Source: Study Energ'Ethic – ULB

Data Base RW / DGO4 Certif. BEP 2017





Long-Term Walloon Buildings Energy Retrofitting Strategy 2050 « Housing » Sector

Mean EPC level = A

?

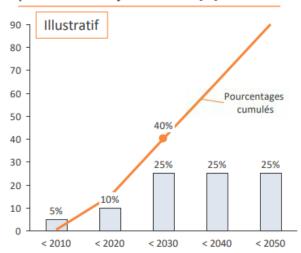
La Wallonie dispose d'un parc de logements très performants, majoritairement rénovés profondément entre 2020 et 2050

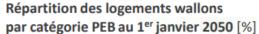
Situation au 1 ja vier 2050

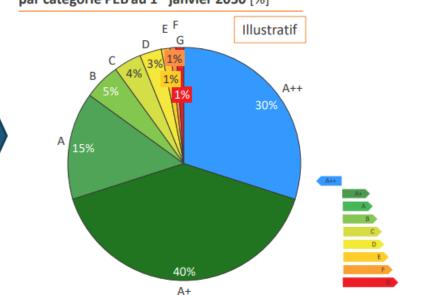




Répartition des logements wallons par année de rénovation énergétique profonde au 1^{er} janvier 2050 [%]









Home Analytics

- Created for Local Authorities to support Energy Efficiency projects
 - EPC data (57%)
 - OS and Street Map data (property XY location, property type)
 - Historic Scotland (Listed buildings/Conservation area)
- Data that is missing is modelled/gap filled
- Modelling differs per variable
 - Statistical, spatial, derived apportioned
- Identifying condominiums with 'Property type' and 'Building Block ID' variable

Variable	Actual Data	Modelled Data	Unknown Data		
	(% of Total)	(% of Total)	(% of Total)		
Property age	60.90%	39.04%	0.05%		
Property tenure	63.69%	36.25%	0.05%		
Habitable rooms	52.46%	47.48%	0.05%		
Primary fuel type	83.02%	16.93%	0.05%		
Secondary fuel type	54.95%	44.99%	0.05%		
Cylinder insulation type	18.29%	81.66%	0.05%		
Cylinder insulation thickness	18.29%	81.66%	0.05%		
Meter type	54.94%	45.00%	0.05%		
Wall construction	60.38%	39.56%	0.05%		
Wall insulation	56.37%	43.57%	0.05%		
Loft insulation	55.99%	43.95%	0.05%		
Room in roof	52.43%	47.51%	0.05%		
Glazing type	35.92%	64.02%	0.05%		
Boiler efficiency (A-G)	36.85%	63.09%	0.05%		
SAP rating band (A-G)	55.09%	44.86%	0.05%		
SAP rating (0-100)	55.09%	44.86%	0.05%		
Total floor area	48.19%	51.76%	0.05%		
RdSAP fuel bill	54.96%	44.98%	0.05%		
RdSAP CO2 emissions	54.83%	45.11%	0.05%		
Total energy consumption	48.09%	51.85%	0.05%		



Identifying Condominiums

Property type

- 94% accurate
- 3 types flats:
- 1.Block of flats
- 2. Flat in mixed use building
- 3. Small block of flats

Building Block ID

- Identifies properties with shared external walls
- Does **not** recognize shared
 staircases
- Building Block ID does not follow numbering per se

Energy Efficiency Measures

- Wall insulation status
- Wall Type
- Glazing type
- Loft InsulationStatus
- Fuel Type/Meter Type

Drawbacks

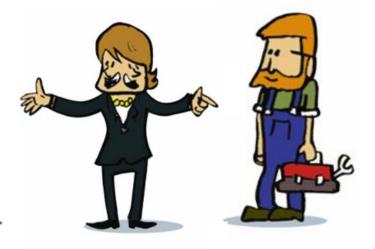
- No data on floor insulation possibilities
- For heat network opportunities Scotland Heat Map needed



ACE-Retrofitting Policy Recommendations



Comprehensive building audits of condominiums should be mandated along with a process of ongoing inspection to realise holistic retrofit and/or renovations.



Federating building's professionals



Energy retrofitting in condominiums: A common challenge for EU countries

A complex and unattractive market for building professionals

Long decisionmaking process to
develop a
renovation
project



Many buildings constructed before 1980, with low energy efficiency

Financing engineering of a renovation project is complex

A key sector to reach cities' energy and climate targets

Objective of the retrofit plan

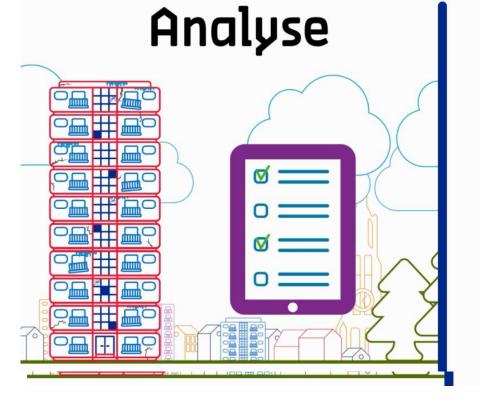
Create a future-proofed building

- Safer
- Healthier
- Comfortable living



The masterplan approach





Meerjarenplanning



The masterplan approach

Mandatory elements

Accessibility Fire Safety Electricity

General safety

Asbestos inventory

EE_standards and regulations

Building envelope

Lifts Technical installations & shafts

Optional elements

Drainage grey and black waste water Biodiversity (green wall and -roof)

Acoustic sound insulation

Water recuperation

Output: Long term maintenance & plan

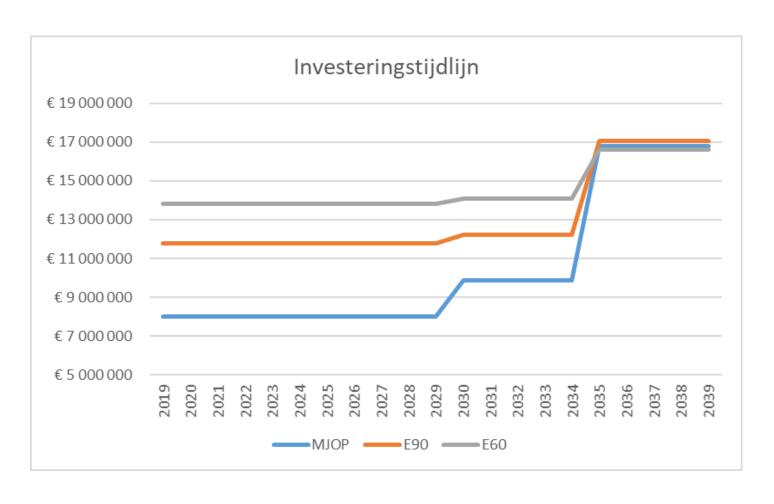
Renovation roadmap	Measures	Impact on EE	E-reduction (% and €)	Investment(€)
* basic infrastructure				
Total cost of investment				
Yearly energy reduction				
Total cost of ownership (20 years)				
Property value before investment*				
Property value after investment **				

Output: comparison of renovation scenarios

Renovation roadmap	BAU-scenario (EXX)	E60
RENOVATION ROADMAP		
Total cost of investment		
Yearly energy reduction		
Total cost of ownership (20 years)		
Property value		

Conclusions Pilot cases

Renovation scenario's: investment timeline



What services do we offer in Antwerp?



Promotion video: our services to facilitate the process

More information: The Masterplan Specification

https://www.nweurope.eu/projects/projectsearch/accelerating-condominium-energyretrofitting-ace-retrofitting/#tab-4

The ACE step-by-step tool is there to make things easier

- Taking off: Masterplan (EN, NL, FR, D)





ACE-Retrofitting Policy Recommendations



Compulsory owners-associations and management arrangements within condominiums should be required to facilitate effective communications and decision-making processes, allow groups to enter into contracts and to develop adequate building reserve funds.



ACE-Retrofitting Policy Recommendations



Expand the range of condominium specific financial support mechanisms to facilitate the retrofit and renovation journey.



Financial barriers for condominiums

- Energy retrofit is a big investment: Mostly financed by reserves, but sometimes these are not existing or not efficiently managed
- Not clear what costs and benefits are
- How to address split incentive owner/renter
- Transferable loans are needed; financial structure for the whole building is needed;
- Too many parties to be contacted, no "single desk": confusing and not efficient
- Condo budget-management is often not transparent



Financial support mechanisms

- Subsidy
- Individual loan/mortgage
- Loan to condominium
- Individual savings
- Condominium reserves
- Energy Performance Contracting
- Energy Supply contracting
- Leasing
- AdoRes (add-on to the building)



Analysis of financial tools for condominiums

Example – 5. Energy (Savings) Performance Contracting

Energy Savings Performance Contracting (EPC) can be a budget-neutral approach to finance retrofits as well as energy-efficiency improvements. An Energy Service Company (ESCO), plans and carries out the retrofit and guarantees energy savings. Payments are made to the ESCO, usually in installments. Even though very similar, EPC differs from utility on bill-schemes. EPC involves an ESCO, which solely focus on energy services, allowing them to consider all parts of a retrofit (master plan), which utility companies might not be able to. By focusing on all necessary steps, ESCOs are able to provide guarantees for the customers' energy savings.

Advantage: Professional support during retrofitting, addresses incentive problems, guaranteed savings, covers complete retrofitting measure

Disadvantage: Can be costly, limited availability for condominiums

Examples: NORESCO (p.43), The guarantEE project (p. 44), Energies POSIT'IF (p. 44), RenoWatt (p. 45), Picardie Pass Renovation (p.45), SUNShINE (p. 46)

Investmen characteristi		Transferability sale	y at	Support		Energy performance risk		Sca	alability to a retrofit	Split	incentives addressed	Rating
Different part can finance pro		No		Yes - extensive		No – carried by ESCO			Yes	Yes		
Possible in partner countries		nsaction costs related to egotiations	Oł	Obligations for av		Product vailable in countries	Can municipa assist?		Suitable resident market	ial	Regulatory or legislative issues	Rating
Yes	-	n due to ESCO compensation)	,	back, Interests, service fees?		es (except Belgium)	Yes (set ESCO or fu	•	Yes		No	

Financing

A Multiscale condominium approach is compulsory



EU Scale / many Countries:

Condominiums are sufering uncredible discriminations:

- Public housing helps dedicated to physical persons
- Condominiums = Private Bodies (legal obligation)

NO HELP

NO LOAN

NO GRANT

Policy Recommandations:

- 1- Give the same rights to every household
- 2- Take into consideration the needs for collective works
- 3- Set-up dedicated « Grants » for trustees







New opportunities

Technical Assistance from BEI/ELENA

Avec le soutien de la Wallonie

Preparation tasks before investments:

Free audits, studies, financial plan, bill of specification,

tendering

RenoWatt - Wallonie:

- Public Buildings
- EPC = difficult/condos







New opportunities New Walloon Helps for Housing

Avec le soutien de la Wallonie

0% Loans for Co-Owners Associations « Safety, Salubrity, Energy Efficiency, ...»

500.000€ / 30 years

Grants are still missing

































Interesting Perspectives

Avec le soutien de la Wallonie

Energy Communities & Collective Self-Consumption of Renewable Energy Production











ACE-Retrofitting Policy Recommendations



Direct funding to support development of the supply chain of building professionals is required to deliver high quality retrofit projects.



How Paris Climate Agency federates building's professionals



Coach Copro for professionnals





Optimisez votre présence sur le marché de l'éco-rénovation en copropriété!

Specific information on energy renovation in great Paris metropol to be up to date with the latest developments in order to control the local specificities and share news







Coach Copro for professionnals

Tailor-made trainings to understand the renovation market locally

Meetings and working groups to lift the brakes on renovation, share knowledge and deploy solutions



Example: Services to trustees and asset managers

Hotline syndics: an advisor available directly for technical, legal or financial advice on an energy renovation project

Meetings in the office: to review the portfolio

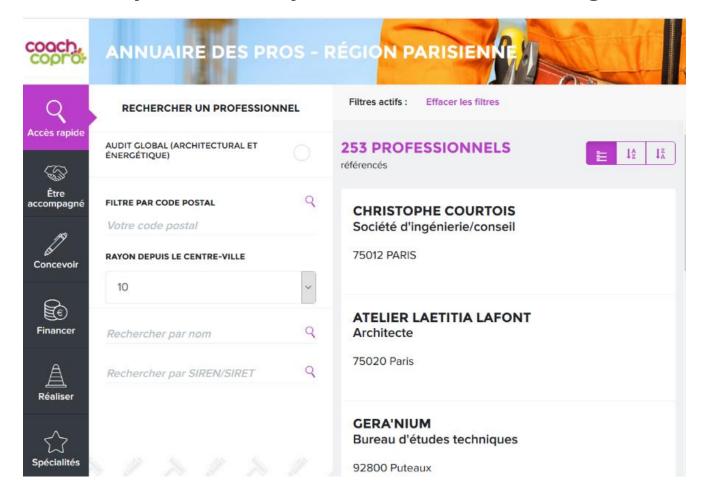
Project support: trusted third party to the Trade Union Council

Documentation, ressources, networking.....



Coach Copro for professionnals

Directory: a visibility of the affiliates among the co-owners





Case studies building professionals







3 examples:

- Feedback from a condominium energy renovation project taking into account renewable energy sources.
- Energy Performance evaluation of exemplary condominium renovations
- Definition and role of the Assistance to the Contracting Authority (ACA) in the renovation process



Supply chain development: Frankfurt

- Main focus:
 - Energy consultants
 - Trustees / building managers
 - → similar challenges, limited leverage of LAs
- Better working supply side through:
 - Supplier coaching
 - Create opportunities for qualified suppliers to present their services:
 - Matchmaking event
 - Directory of building professionals
 - Continuous dialogues with suppliers
 - → being counterpart and partner



ACE-Retrofitting Policy Recommendations



Expand energy advice services to provide a complete support package and service to condominium owners.



10 Focus groups with condominiums in the 6 cities: what do people flag?

- Subsidies not reliable/not continuous
- Decision-making as a group is problematic
- Old people do not want to invest, but also young people...
- Insufficient legal incentives/sanctions
- Not enough known about the various options
- No clear data about the benefits

Main barrier:

DIFFICULT DECISION MAKING PROCESS!





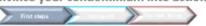
Tools for decision-making





ACE-Retrofitting

North-West Europe





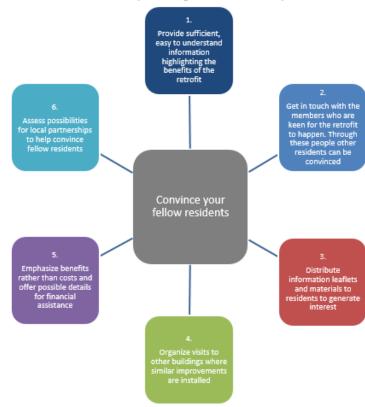


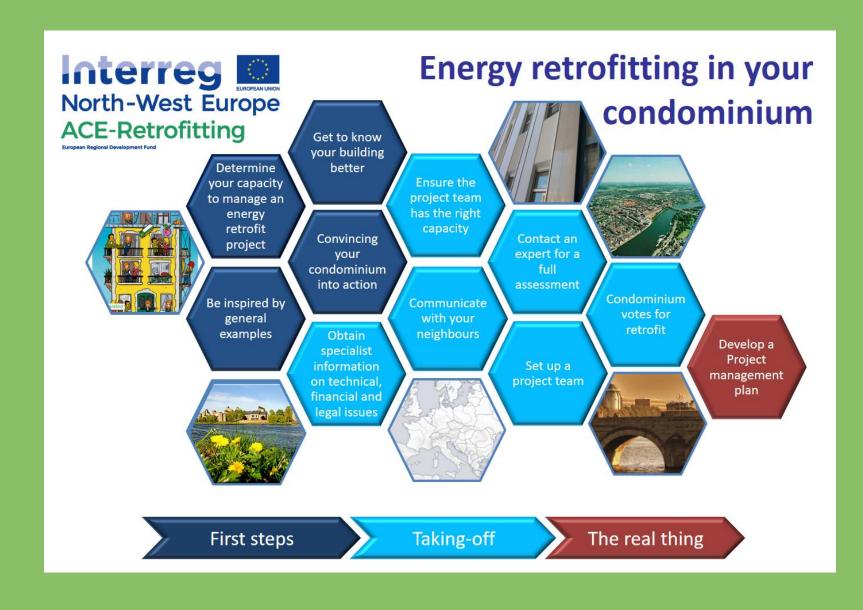
Who is this tool for?	Co-owner who wants to create support for retrofitting Condominium Board Retrofitting coach
What is the purpose of this tool?	This tool will help to structure your efforts to convince others that en- ergy retrofitting is necessary and feasible
How to use this tool?	After some general information you will see a figure with 6 steps. You can click on each step and you will receive more explanation. Also, you will receive an indication which other tools you can explore.
Next steps	Form a resident's project team. See also "determine your capacity to manage an energy retrofit project/ensure the project team has the right capacity/set up the project team".

vfain source for whole document: http://www.lowenergyapartments.eu/the-leaf-toolkit/the-toolkit/

How to convince residents?

Click on each of the steps in this figure to obtain more explanation



















« Terug

Gegevens project

Gemeente Maastricht

vve-balie@maastricht.nl

Projectmenu

VvE balie

Fase 1 - Verkennen

Leer uw gebouw beter kennen

Laat u inspireren door ervaringen van anderen

Is in uw VvE voldoende kennis en kunde aanwezig?

Zet uw VvE aan tot actie

Breng behoeftes in kaart

Fase 2 - Voorbereiden

Heeft u aanvullend advies nodig?

Hoe organiseren we dit project binnen de VvE?

Welke informatie hebben we als VvE nodia?

B VvE-energiebalie Maastricht

U wilt u appartementencomplex zo energiezuinig en duurzaam mogelijk maken. Dat vraagt uitzoekwerk. Een deel daarvan hebben wij voor u gedaan. De VvE-energiebalie helpt u stap voor stap op weg.

In drie fases naar een duurzamere woning.

- > Fase 1: Verkennen
- > Fase 2: Voorbereiden
- > Fase 3: Uitvoeren
- > Trainingen en bijeenkomsten
- > Over de VvE-energiebalie Maastricht

VvE-energiebalie Maastricht







66 Hulp bij het verduurzamen van uw VvE! **55**



Projectmenu

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Besluitvormingsmomenten

Fase 3 - Uitvoeren

Nieuws VvE-energiebalie

Trainingen en bijeenkomsten

First steps

Taking-off

The real thing



Fase 1 - Verkennen

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Fase 3 - Uitvoeren





Case Study



Vereniging van Eigenaren (VvE) Daalhof Noordblok 1

Masstricht, Veleriushof 65a, Dusthel, Nederland

floorejaan 1960 Aantal econinge 32

Oppendebt woring gentialed: engineer 128 m2 hedige atetus renfissizating denning aless / atvoering aless / inger Detwit het manutrant seders, Mae

Maestricht wordt, net als alle andere gemeenten in Nederland, in 2050 volledig lätmaatneutraat. Dat betekent dat er per sakto geen uitstoot van CO2 meer plaatsvindt. Een grote opgaee waar Maastricht, samen met alledie partners, volop mee aan de slag is. Onder de vlag van Æmissalenseromaastricht werken we aan een energiezuinige stad. Appartementerocompliceen energiezuinig maken en verduurzamen vallen onder die vlag in caesstudies oosal deze belichten we de stappen die Verenigingen van Eigenanen zetten om hun steen bij te dragen aan een Klimaastricutraal Maestricht in 2050.

De belangrijkste resultaten in vogelvlucht n vogelvlucht

- Waardevermeerdering van het gebouw: Getalien zijn niet bekend, maar onlangs bleek dat het omzetten van de hypotheek gemakkelijker was geworden door de getroffen maatregelen.
- Verwachte dalling energieverbruik: Tot 25% door daksolatie, tot 12%-20% door spouwmuurisolatie, tot aan 8%-10% door vioerisolatie. In totaal dus tot 55% dalling - afhanivelijk van de meds aanwezige hoewelheld isolatie. De zonnepanelen helbben zich inmiddels
- + Energielabelverbetering: Van label C naar label A.
- Totale kosten getroffen verduurzamingemaatregelen: €75.000,, waarvan €5.600, later terug is ontvangen aan subsidie.
- Verhoogde comfort: De warmte blijft beter behouden, langer hangen in de woning en de temperatuur schommelt minder.
- Duur van de werkzaamheden; panelen 3 maanden, isolatie dak & kruipruimte 3 weken, appuwmuur 4 weilen.

Fase 1 - Verkennen

Leer uw gebouw beter kennen

Laat u inspireren door ervaringen van anderen

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Welke informatie hebben we als VvE nodig?

Tips voor goede communicatie met mede VvE-leden

Besluitvormingsmomenten

Fase 3 - Uitvoeren

Beantwoord de 6 onderstaande vragen.

Is er iemand beschikbaar die ervaring heeft met bouw/verduurzamingsprojecten? Die in staat is om de voorgestelde technische oplossingen te begrijpen en evalueren en die kan communiceren met bouwprofessionals? (bijvoorbeeld een bouwingenieur, een architect, een manager van een installatiebedrijf, een klusjesman)

o Nee o Ja	De VvE kan gebruik maken van een (betaalde) externe expert [geef een naam op]
o Ja	We hebben iemand in onze VvE met enige ervaring op dit gebied [geef een naam op]
o Ja	We hebben iemand in onze VvE met uitgebreide ervaring [geef een naam op]



Fase 1 - Verkennen

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Fase 3 - Uitvoeren





Welke informatie hebben we als VvE nodig?

In deze voorbereidende fase gaat u op zoek naar de juridische, financiële en technische mogelijkheden en onmogelijkheden voor uw plannen.

Juridische informatie

Sommige maatregelen kunt u zelfstandig in uw appartement treffen, andere maatregelen moet u gezamenlijk treffen. De splitsingsacte geeft hier uitsluitsel over. Raadpleeg deze altijd alvorens maatregelen te treffen.

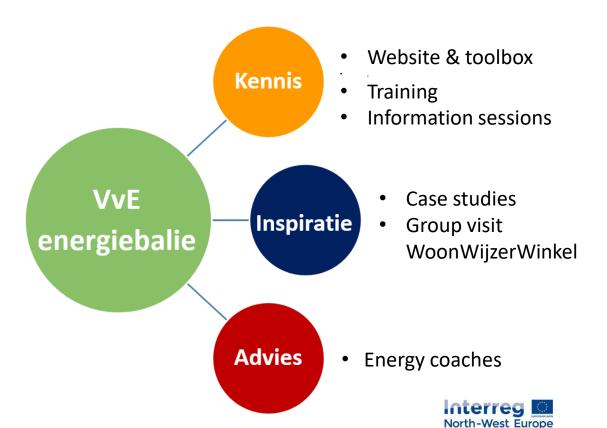
Wilt u weten of uw VvE voldoende spaart, hoeveel stemmen nodig zijn voor de maatregelen die u wilt treffen of heeft u andere juridische vragen, wij geven u hier een aantal links naar websites die u verder kunnen helpen.

- https://www.vverecht.nl/
- https://www.vvebelang.nl/vve-informatie/over-vves/appartement-enregelgeving/
- https://www.thuisindevve.nl/
- https://www.vveadvies.nl/over-vve-advies/
- https://www.appartementeneigenaar.nl/
- http://www.101vvevragen.nl/over-101vvevragen-nl/

Welke financieringsmogelijkheden zijn er?

VvE **Energiebalie**Maastricht

- Service offering
 - Con dom iniu m Ene rgyc oun ter Maa stric ht



ACE-Retrofitting





ACE-Retrofitting Policy Recommendations



Improve links between owners (Demand) and building professionals (Supply).



Coach Copro: a global approach that has proved its worth



Co-owners

Raising awareness, informing and accompanying co-owners in a renovation project



Encourage exchanges between professionals, facilitate access to training, participate in the structuring of the network of renovation pros

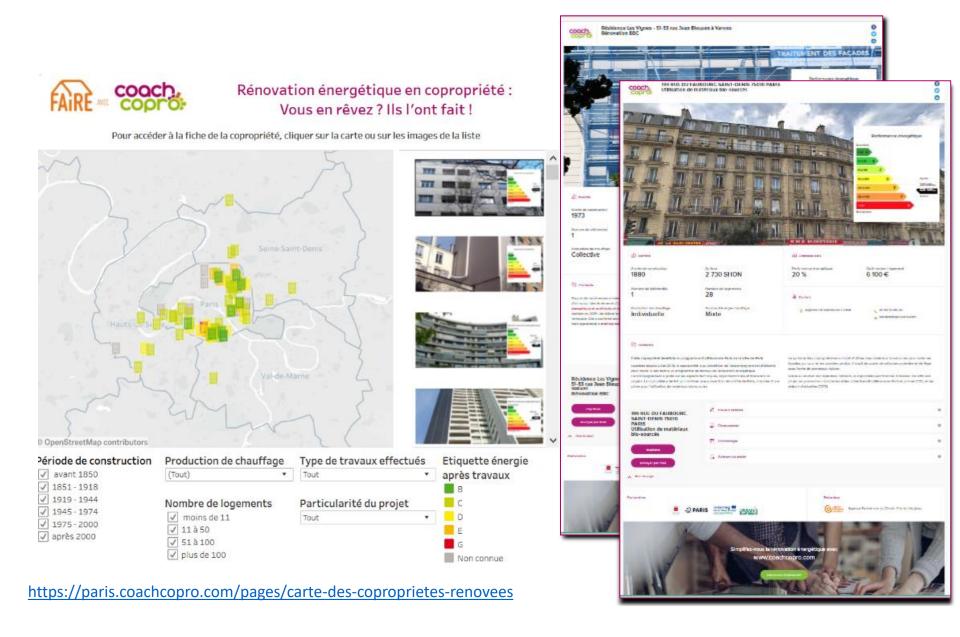








Example: The map of renovated condominiums

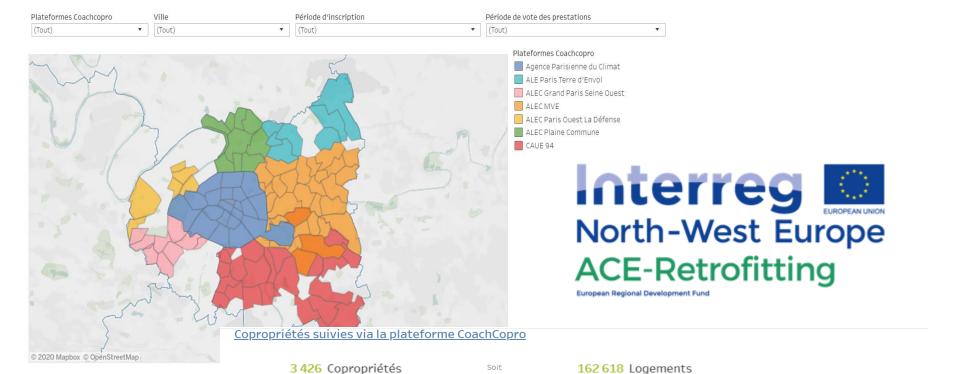


Example: Observatory - CoachCopro

- Key figures of retrofitting in condominiums:
 https://paris.coachcopro.com/pages/les-chiffres-cles-de-la-renovation-en-copropriete-sur-la-metropole-parisienne
- Key figures of retrofitting works in condominiums:
 https://paris.coachcopro.com/pages/les-travaux-de-renovation-energetique-en-copropriete-sur-la-metropole-parisienne

+ Instrumentation of 8 condominiums to monitor & understand energy cosumption





Analyses des prestations

Les analyses ci-dessous donnent le nombtre de copropriétés et de logements associés ayant réalisé ou voté des prestations (audits, MOE, travaux). Pour distinguer le statut de prestations, vous pouvez utiliser le filtre ci-contre. Les filtres territoriaux sont également actifs.



Statut des prestations

En projet

✓ Réalisé ✓ Voté Audits

Copropriétés : 673 Logements : 54 446

Montants: 4 735 143 € TTC

Maitrises d'oeuvre

Copropriétés: 186 Logements: 14883

Montants: 9 708 417 € TTC

Travaux

Copropriétés: 271 Logements: 20 222

Montants: 170 500 722 € TTC

Analyses de la performance énergétique

Ces quelques indicateurs donnent une tendance de la performance énergétique du parc de copropriétés rénovées inscrites sur CoachCopro. Ils sont calculés lors des audits énergétiques et des maitrises d'oeuvre, donc les valeurs sont théoriques (usages règlementaires).



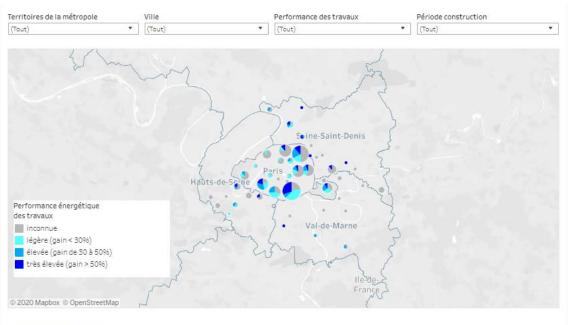


Consommation initiale moyenne

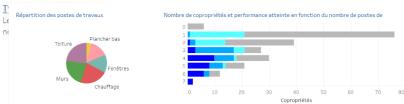
260,2 kWh/m²/an

Consommation projetée moyenne 152,7 kWh/m²/an Projets BBC Rénovation (104 kWh/m²/an) Projets Plan Climat Paris (80 kWh/m²/an)

3



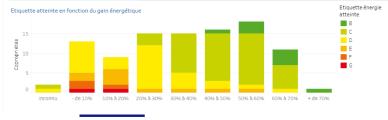




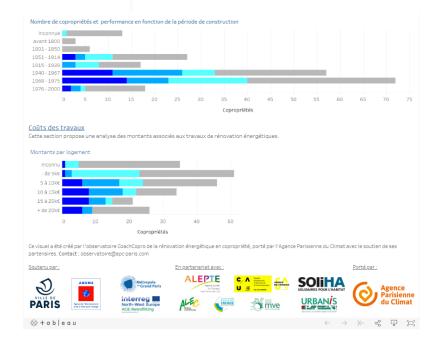
Performance énergétique des travaux

Cette rubrique analyse les étiquettes énergétiques projetées après travaux, et la performance atteinte en fonction de la période de construction des bâtiments. Des chiffres clés sont d'abord proposés.

	Copropriétés	Logements	Gain moyen en %
très élevée (gain > 50%)	30	2 639	59
élevée (gain de 30 à 50%)	36	3 336	40
légère (gain < 30%)	60	6 210	14
Inconnue	121	6 384	
Synthèse	247	18 569	32



rformance atteinte en fonction du



Example: Matchmaking event:

Le forum de l'éco-rénovation





Improving links between demand and supply: <u>Frankfurt</u>

- Linking is a key element in the process
- Challenges for both sides to get in touch
- Major task = to create meeting opportunities:
 - Events:
 - Annual condominium forum
 - Frankfurt's first retrofitting day
 - Innovative formats with neighbourhoods
 - Active participation in existing events
 - Online:
 - Relevant information to different target groups
 - Creating and promoting a directory (WEG-Bereiter-Liste)



WEG-Bereiter-Liste

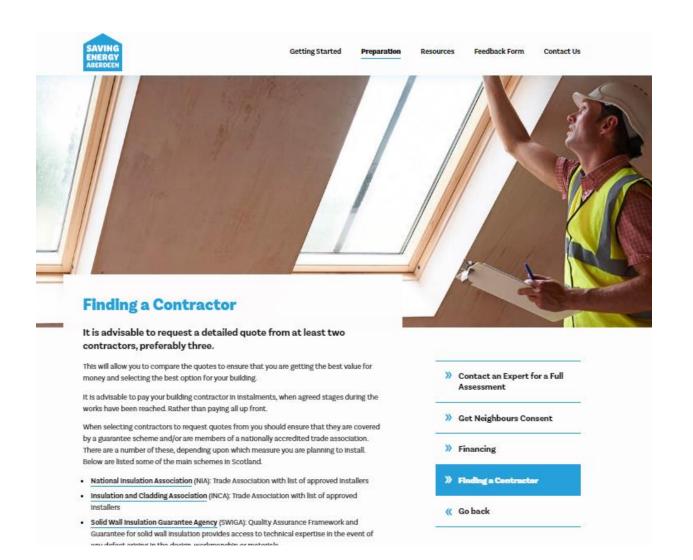
Qualifizierte Beratungen für Ihre WEG

Name des Objektbetreuers	Unternehmen	PLZ & Ort	Selbstverpflichtung	Erfahrung mit Energie- Beratungen	Erfahrungen mit d. Umsetzung von Sanierungsmaßnahmen	Zusatzgualifikationen	Mitgliedschaften
,							
Gerhard Holzapfel	Hausverwaltung und Energieberatung Holzapfel	65812 Bad Soden	©	o		Gelisteter Energieberater	Deutsches Energieberater-
	<i>⋑</i> 06196-6522824					der WEG- Bereiter-Liste	Netzwerk e.V. Verband der
	── holzapfel@haus2energie.de					bereiter-Liste	Immobilienverwalter
	http://www.haus2energie.de						Hessen e.V.





Aberdeen Finding a Contractor





Your political commitment

Want to launch a retrofit policy for condominiums in your local administration?

Download and sign the charter so that your local administration commits itself to:

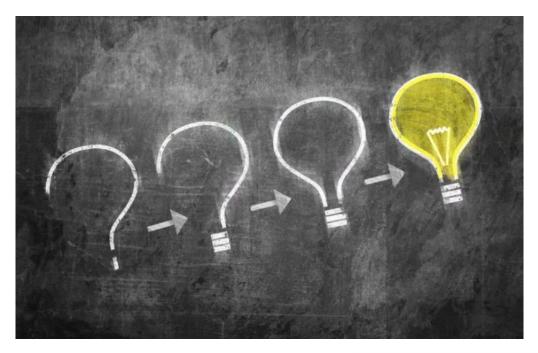
- Stimulating the acceleration of condominiums energy retrofitting in our territory
- Issuing a plan or strategy to speed up retrofitting of condominiums in our territory
- Working simultaneously on demand and supply by facilitating and linking them Exchange experience with other local authorities in Europe



https://www.nweurope.eu/media/7727/ace charter en.p



Questions?







How Brussels
Environment
developed a service
for condominiums,
with the help of
stakeholders and
target groups



26 March 2020, Brussels Annick Schwaiger, Brussels Environnement



Bruxelles Environnement

DÉPARTEMENT TRANSITION DES PROFESSIONNELS

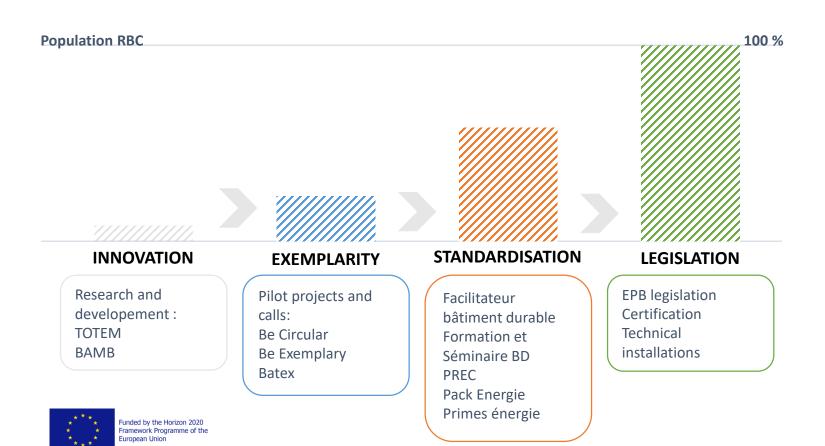








« Transition des professionnels »







INNOVATE

TARGET IN BRUSSELS: CONDOMINIUMS







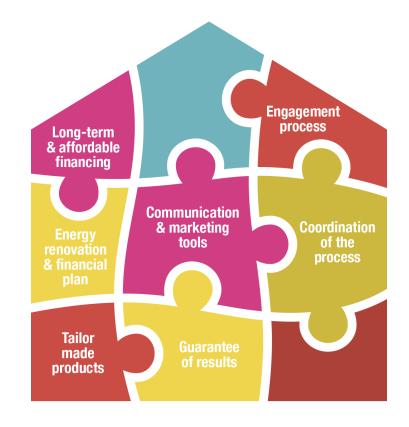




Innovate solution

Develop and roll out attractive **energy retrofit packages**, ideally offered in one location – a **one-stop-shop**

Started 2017









Innovate partners

Coordinator Energy Cities

Expertise

Vesta Conseil & Finance aka Energies Demain (FR)

Experienced partners:

- ✓ Brussels Environment (BE)
- ✓ Parity Projects (UK) > London Boroughs
- ✓ Riga Energy Agency (LV)
- ✓ KAW (NL) > 6 Dutch cities
- ✓ Frederikshavn Municipality (DK)

Funded by the Horizon 2020 Framework Programme of the European Union

Learning partners:

- ✓ Heerlen Municipality (NL)
- ✓ Linnaeus University (SE) > Municipality of Växjö
- ✓ Litoměřice Municipality (CZ)
- ✓ Mantova Municipality (IT)
- ✓ AGENEX (ES)
- ✓ Aradippou Municipality (CY)









Development steps Brussels

- Baseline analysis and & condominium renovation market gap analysis
- = Desk review and benchmark study
- + Interviews and surveys with renovation support professionals and experts
- Development business model 1 (theoretical)
- Collaboration with CoopCity: adaptation of business model through consultation of target groups
- Pilot project
- Business model V2



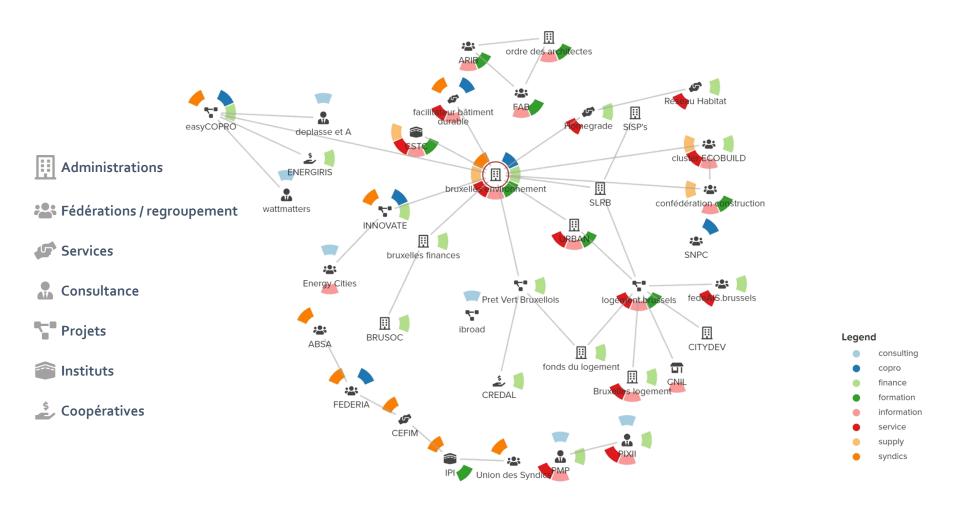
FIRST STEP: BASELINE AND MARKET GAP RESULTINES

- Many players in the Brussels Capital Region (market and non-profit)
- Target groups not well known to Brussels Environment
- First interesting contacts with experts and stakeholders











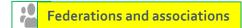




Our priority contacts:

- Professional support services and experts, to start research by establishing guidelines for the development
- Representatives of building managers and co-owner associations to adapt the development and have concrete answers on needs and feedback on ideas
- Target groups: Co-owners and building managers as focus groups, to know their needs and to test ideas on the actual future 'clients'

Administrations











Coopératives



Legend

formation information

copro

consulting



supply









STEP 2: DEVELOPMENT OF A BUSINESS MODEL

Supported by COOPCITY



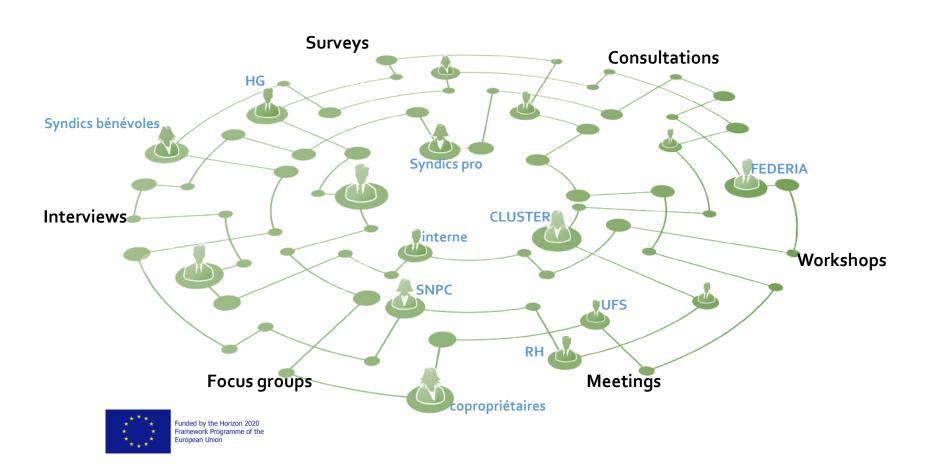






Innovate Brussels









Online survey (co-owners)

~ 500 responses



Focus group WORKSHOPS (co-owners and building managers)

~25 participants/session, 3
sessions
(2x barriers et 1x
solutions/drivers)



Interviews and group meetings (int/ext)

~25 sessions



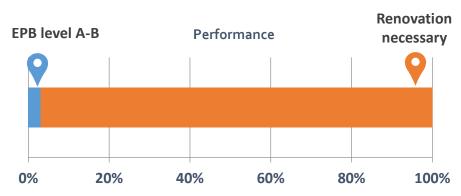






Results



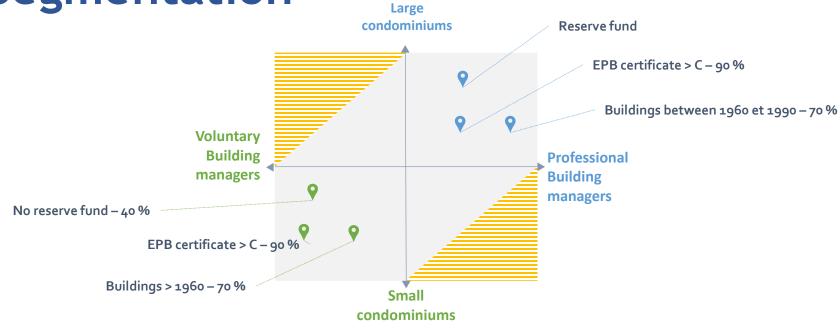




Results: segmentation

	Condominiums Less than 10 units	Condominiums 10 to 50 units	+ 50 units
Building manager	Mostly voluntary	Mostly professionals	
Situation financière	Small reserve fund (80% - 10.000€) 35% : au moins un mauvais payeur	More than 90% have a reserve fund (50% + 10.000€)	
Type of building	70% from before 1960) +95% EPB > C or unknown	70% built between 1960-1990 Higher EPB but not well known	
Apprehensio ns	Decision making process and financing	Decision making	
Difficulties	1. To find a contractor	 To find a contractor To find the financial means To get the right technical advice Follow-up 	
Mativations	Emorgoneyand	logal mascurac	

Segmentation



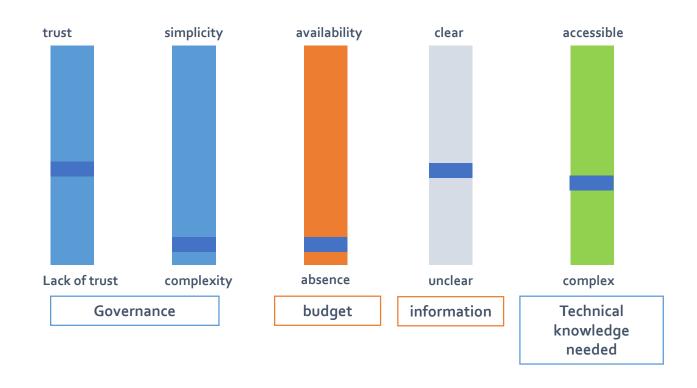








Issues to be addressed through the OSS





To be integrated in the OSS

Posture

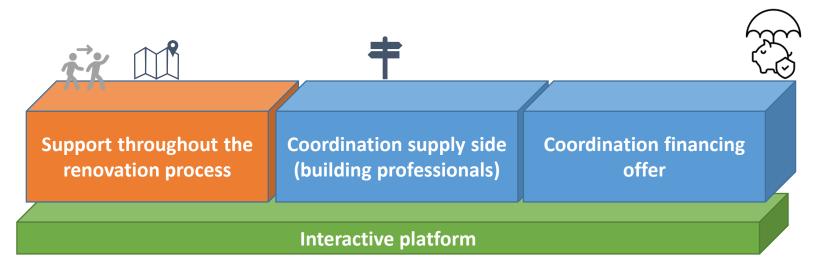
- Neutrality and trust = important
- Combine 3 profiles: Technical + Social + Financial
- Importance of mobilizing skills to present the elements in general assembly and to convince of the positive aspects
- Proactive approach
- Close collaboration with market and professionals

Financial solutions

- To be adapted to condominiums and their apprehensions to make them attractive
- Professionals
 - · Training and coordination to build community
- Monitoring
 - Necessary for confidence



For Brussels: coordination model

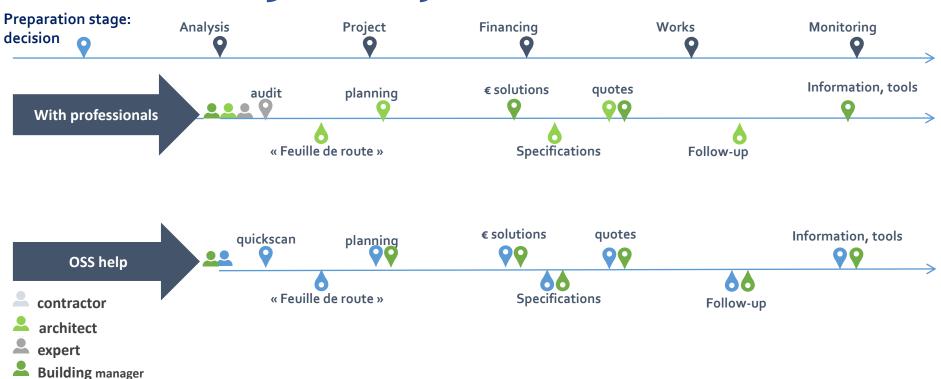


Coming in 2021 under the name Sustainable Building Facilitator (to be changed for better notoriety)



OSS Retrofitting coach

Customer journey scenarios



Capacitating environment

+ Awareness raising, communication and pro-active approach



For:

- Increasing the demand
- Increasing awareness
- Increasing impact
- Reducing barriers
- Creating a coherent context







So, what did we learn?

That a OSS service is needed to activate condominiums for renovations

Who the stakeholders players are and what they do

That we need the market and its players and want to work together, to make the OSS effective

What the barriers and drivers

The best way to put everything together







Levels of collaboration

- To analyse the existing situation: renovation support professionals and experts interviews
 - 3. To understand the market: **professional associations/representati ves** regular contacts, interviews and group meetings



- 2. To know the needs and realities of condominiums and test ideas and measures to be taken: **target group representatives** interviews and group meetings
 - 4. **Target groups** for a direct contact with the field





Future collaborations – a network!

- 1. Internal condominium task force: transversal work group to build capacitating environment
- 2. External group of experts and target group representatives: work group to evaluate and adapt measures and projects
- 3. Target group representatives for specific questions (legal transpositions, adaptation of tools, ...)
- 4. Bilateral developments for the stimulation of the supply side contractors and providers
- 5. Bilateral developments for the stimulation of the financial market
- 6. Training for professionals
- 7. Target groups: co-owners and building managers: regular meetings, to be determined







Thank you, your help has been very much appreciated



Centre d'Etudes Economiques et Sociales de l'Environnement







And many others! ©





Thank you for your attention And take care!

Annick Schwaiger

<u>aschwaiger@environnement.brussels</u>













Questions?



