



Who is behind the project?

Coordinator
Energy Cities

Expertise
Energies Demain (FR)

- ✓ Brussels Environment (BE)
- ✓ Parity Projects (UK) > *London, Sussex, Oxfordshire*
- ✓ Riga Energy Agency (LV)
- ✓ KAW (NL) > *Enschede, Zoetermeer, Den Bosch, and Hoogeveen*
- ✓ Frederikshavn Municipality (DK)

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



OUR VISION

Deep energy retrofits



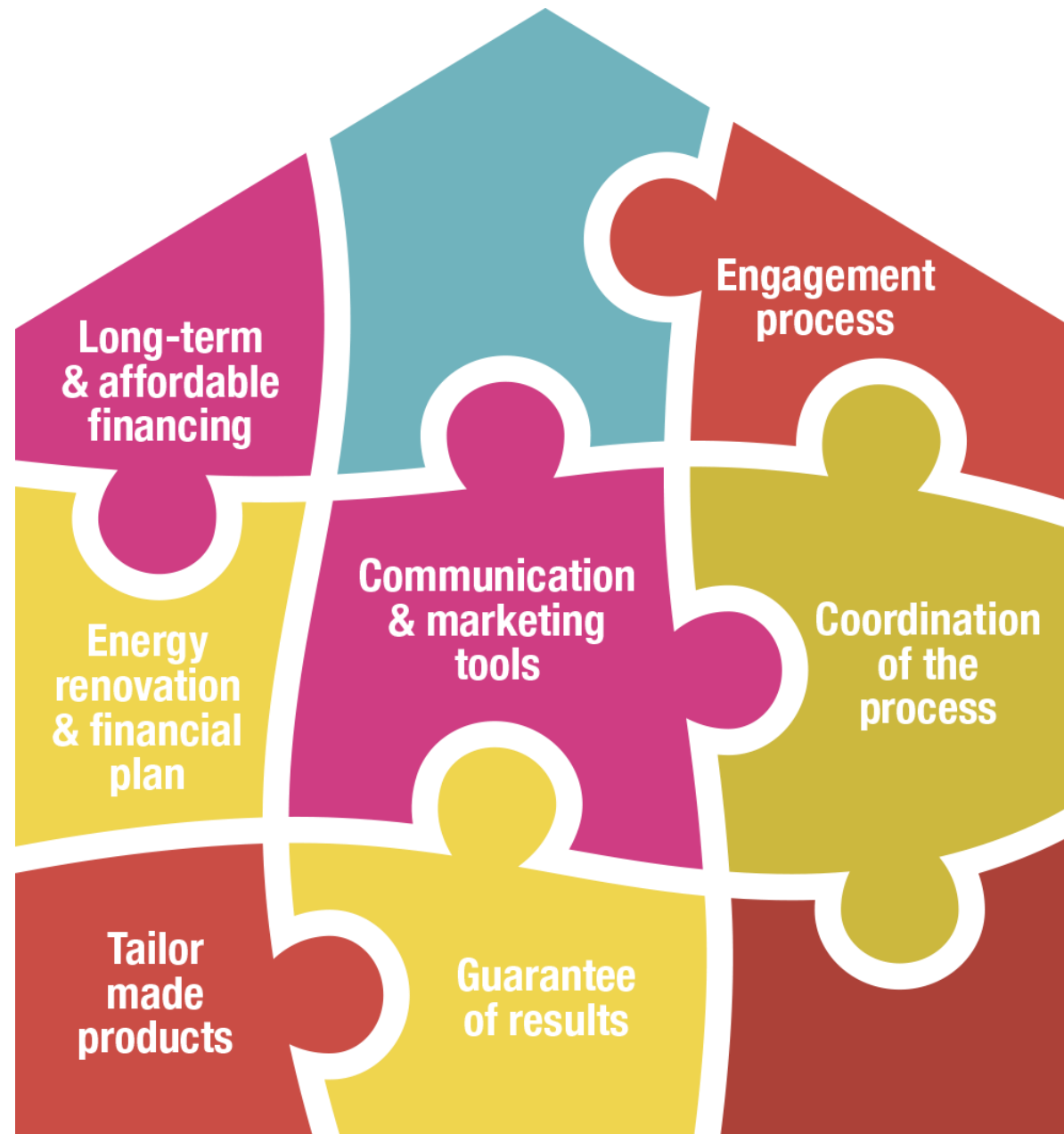
OUR TARGET

Homeowners of
single family houses
and condominiums



OUR SOLUTION

Attractive energy efficiency services package offered in a one-stop-shop



Alternative business models

Local authorities = developers

- ✓ Public company
- ✓ Public-private company
- ✓ Contract / partnership with a private company or a cooperative

ONE STOP-SHOP



Local authorities = coordinators

- ✓ Bringing together actors who can provide different services (pieces of puzzle), ideally *'under the same roof'*



Financing

Financing for one stop shop:

- ✓ Public subsidies (only for part of the action)
- ✓ EE Certificates
- ✓ Fees paid by the homeowners for the service
- ✓ Fees paid by the craftsmen

Financing for homeowners:

- ✓ Bank loans
- ✓ Other loans (from public authorities, private finance, OSS)
- ✓ Subsidies
- ✓ Tax incentives
- ✓ Guarantees
- ✓ EE certificates
- ✓ Up front financing



Which financing scheme for which homeowner?

	Very low income households	Low - medium income households	High income households
Commercial loans	No access	No access Unattractive interest rates	Attractive interest rates
Subsidies	Eligible (problem = upfront financing)	Not eligible	Not eligible
Solution	'Subsidy Advance Payment Fund', soft loans, grants, tax incentives, EE certificates, guarantees	Soft loans, grants, tax incentives, EE certificates, guarantees	Technical assistance

Which financing schemes do we rely on?

Project partner	Financing scheme
Brussels Capital Region (Belgium)	Regional subsidies and soft loan scheme , national funds, commercial loans
Parity Projects (UK)	National funds, commercial loans
Riga Energy Agency (Latvia)	Local subsidies
KAW – Reimarkt (The Netherlands)	National funds, commercial loans
Frederikshavn (Denmark)	Negotiated commercial soft loans , national funds
Heerlen (The Netherlands)	National funds, commercial loans
Litomerice (Czechia)	National funds, commercial loans
Mantova (Italy)	National funds, commercial loans
Extremadura energy agency (Spain)	Regional guarantee fund , national funds, commercial loans
Linnaeus University (city of Växjö, Sweden)	National funds, commercial loans
Aradippou (Cyprus)	Local subsidy and soft loan scheme , national funds, commercial loans

Examples of financing schemes set up by local authorities

Aradippou municipality (Cyprus)

Η ΑΡΑΔΙΠΠΟΥ 19

ΑΝΑΚΟΙΝΩΣΗ

ΔΗΜΙΟΥΡΓΙΑ ΜΗΤΡΩΟΥ ΕΝΕΡΓΕΙΑΚΩΝ ΑΝΑΚΑΙΝΙΣΕΩΝ ΚΑΤΟΙΚΙΩΝ ΑΡΑΔΙΠΠΟΥ ΚΑΙ ΤΕΧΝΙΚΗ ΒΟΗΘΕΙΑ ΠΡΟΣ ΤΟΥΣ ΠΟΛΙΤΕΣ ΜΕ ΤΗ ΜΟΡΦΗ ΔΗΜΟΤΙΚΗΣ ΧΟΡΗΓΙΑΣ ΜΕΧΡΙ 7%

Ο Δήμος Αραδίππου στα πλαίσια του Ευρωπαϊκού Προγράμματος INNOVATE, One Stop Shop δημιουργεί Μητρώο Ενέργειας Ανακαινίσεων και Φωτοβολταϊκών Κατοικιών, στα οποία μελλοντικά έργα μπορούν να καταγραφούν και να λάβουν δημοτική χορηγία μέχρι 7% επί της συνολικής αξίας του κάθε έργου με επιπλέον 1% σε περίπτωση πλήρους δανειοδότησης/ χρήσης πιστωτικής κάρτας (δημοτική χορηγία μείωσης τόκου για ενεργειακές ανακαινίσεις)

Περισσότερες πληροφορίες μπορείτε να λάβετε από Λειτουργό του Δήμου, στα τηλέφωνα: 24 811 091, 24 811 093



Το έργο αποτελεί πιλοτική εφαρμογή, πιλοτικού προγράμματος για περισσότερο από 500 κατοικίες. Θα κρατηθούν σειράς προτεραιότητας σε τρεις διαφορετικές κατηγορίες:

- Μικρά φωτοβολταϊκά και ανακαινίσεις μέχρι 5.000 ευρώ,
- Μικσαία φωτοβολταϊκά και ανακαινίσεις από 5.000 μέχρι 15.000 ευρώ
- Μεγάλα φωτοβολταϊκά και ανακαινίσεις για ποσό μεγαλύτερο των 15.000 ευρώ.

Σημειώσεις:
Ο πλήρης οδηγός επιλογών διατίθεται από το Δήμο.
Η χορηγία καλύπτει μέρος των εξόδων Μελετών του έργου περιλαμβανομένων Ενέργειακών Μελετών που θα πιστοποιούν την εξοικονόμηση ενέργειας και την παραγωγή καθαρή ενέργεια από τις εγκαταστάσεις.
Οι εγκαταστάσεις δεν θα πρέπει να έχουν λάβει άλλη χορηγία από το σχέδιο Παράσης Χρημάτων του Υπουργείου Ενέργειας, Εμπορίου και Βιομηχανίας

Φωτοβολταϊκό + Ενεργειακή Αποδοτικότητα μία ή περισσότερες από τις ανακαινίσεις που απαιτούνται

- Περσικές
- Κιπτά και σταθερά κήματα
- Συστήματα αερισμού και βροχοσώου
- Αλλαγή ή αναβάθμιση ηλεκτρικών θερμοσίφωνων
- Αποδοτικότερα συστήματα Air Conditioning
- Αλλαγή ή αναβάθμιση boiler πετρελαίου σε ηλεκτρικό
- Θερμομονώσεις Θραυτές, Τόπων και Δαπέδου
- Ενεργειακό αποδοτικότερος φωτισμός
- Ενεργειακό αποδοτικότερες συσκευές (π.χ. τηλεόραση, φridge, πλυντήριο)



innovate
http://www.innovate.gov.cy/innovate/

Innovative municipal grant scheme

- ✓ 1st part: rewards citizens for energy renovations based on energy savings achieved (EUR per kWh saved) and clean energy produced by PV (EUR per kWp installed capacity)
- ✓ 2nd part: through loan interest subsidies encourages loan-undertaking in order to maximize EE investments. The objective is to offer 0% interest loan provided by partner banks.
- ✓ Promotes private contractors/professionals contributing to the grant (public-private funds matching): 1 to 1 EUR matching of private with public sources.
- ✓ Local companies have expressed willingness to contribute to the municipal scheme through 4% discount vouchers (in addition to the grant).

Extremadura region (Spain)



Regional guarantee fund

- ✓ The Fund will improve the conditions offered by the commercial banks currently: lower interest rate and long term financing (over 12-15 years)
- ✓ Only for (energy) housing renovations
- ✓ Under development (first Regional Law has been approved. Currently, it is waiting for the approval by the Spanish National Government)



Riga (Latvia)

Local co-financing scheme:

Based on municipal regulation Riga Energy Agency provides support for:

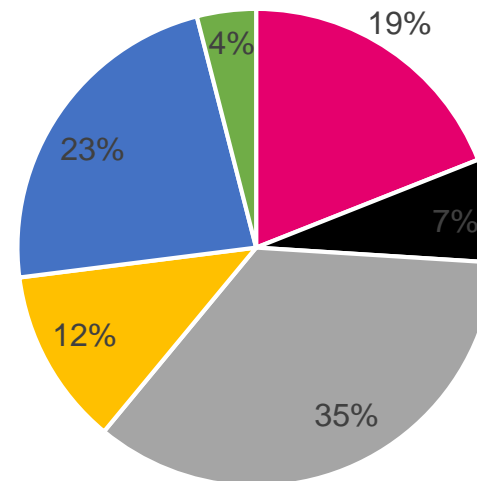
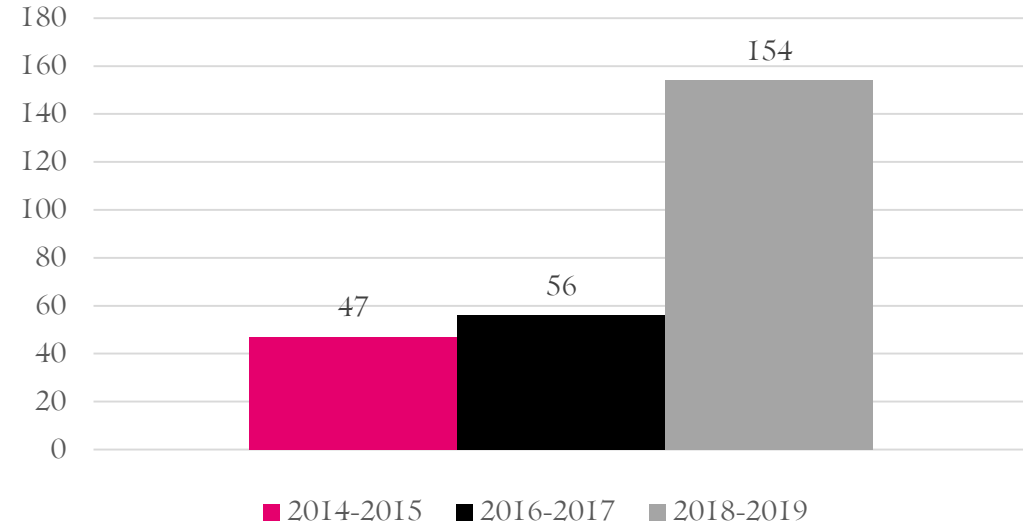
- 50% co-financing for energy retrofitting (construction works)
- 80% for energy audits
- OSS consultation, including technical proposal preparation

Municipality provides 90% immobility tax discount for establishing (energy) cooperative during 2 years period

Results for 2018-2019:

- EUR 1 185 848 - overall provided municipal co-financing
- 154 – total number of approved applications
- 385 000 m2 impacted, 10 000+ inhabitants engaged

Energy efficient renovation works (objects)



- Roof replacement and attic insulation
- Foundation reinforcement and plinth waterproofing
- Internal networks / water supply, heating, electricity
- End wall insulation
- Replacement of windows and doors in stairwells
- Renovation of lifts and balconies



Brussels Capital Region (Belgium)

LE PRÊT VERT BRUXELLOIS
POUR AMÉLIORER VOTRE
HABITATION



www.maisonenergiehuis.be

Soft loans:

- ✓ Partnership with a financial cooperative CREDAL and a cooperative housing company 'The Housing Fund' > offering **soft loans**
- ✓ **Technical assistance** for homeowners via "Homegrade" (initially Energy House), and "Sustainable building facilitator" for large condominiums



Frederikshavn municipality (Denmark)

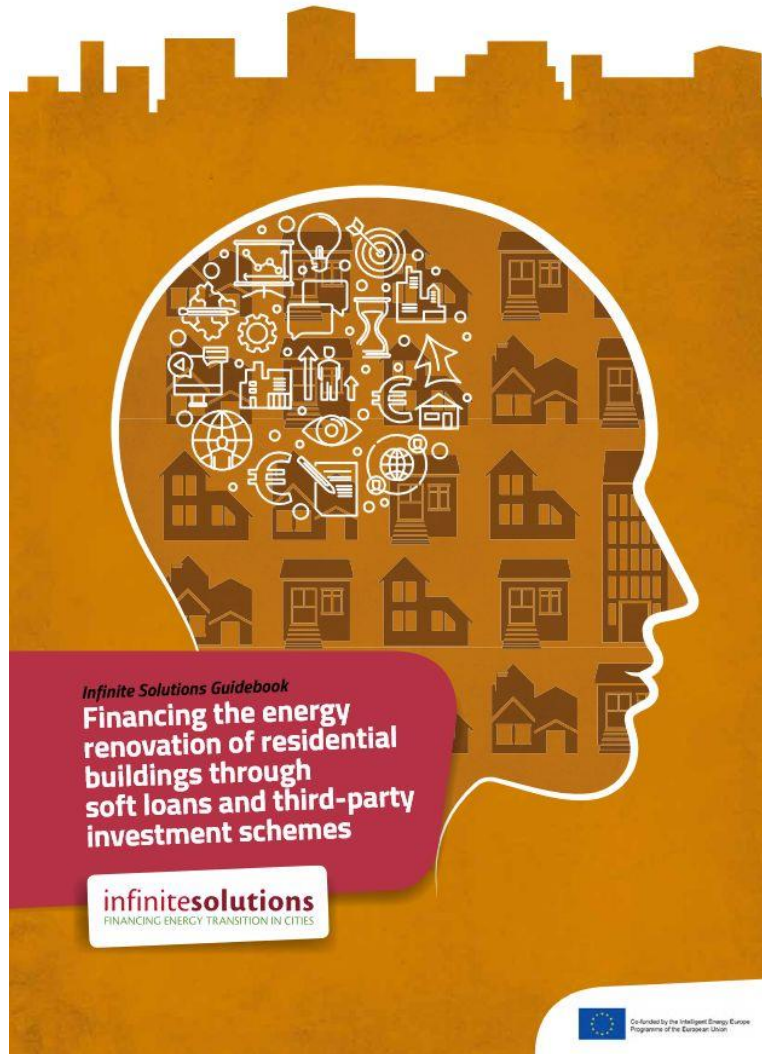


Soft loans:

- ✓ Partnership with **8 local banks**
- ✓ **Info truck** coming to the neighborhoods
- ✓ **325** energy retrofits done




Resources



Infinite Solutions Guidebook
Financing the energy renovation of residential buildings through soft loans and third-party investment schemes

infinite solutions
FINANCING ENERGY TRANSITION IN CITIES



Co-funded by the Intelligent Energy Europe Programme of the European Union



Funded by the Horizon 2020 Framework Programme of the European Union

INNOVATE

Inventory of best practices for setting up an integrated energy efficiency service package including access to long-term financing to homeowners

Extensive analysis of the existing energy efficiency services operators and long-term financing schemes



Vesta Conseil et Finance
February 2018



Final event

&

Capacity
Building
Workshop

22 April
2020

CITIES CITIZENS ENERGY FORUM

Heerlen
The Netherlands

22-24

APRIL 2020



Setting up innovative
energy efficiency service packages
for home renovations

Thank you

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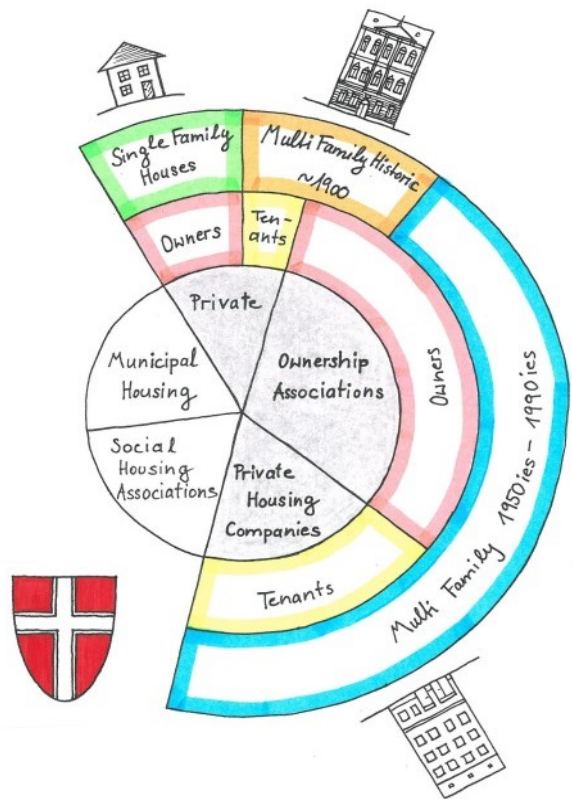


Funded by the Horizon 2020
Framework Programme of the
European Union

[Financingbuildingrenovation.eu](https://financingbuildingrenovation.eu)

RenoBooster

The Smart Renovation Hub Vienna



Covenant of Mayors' Investment

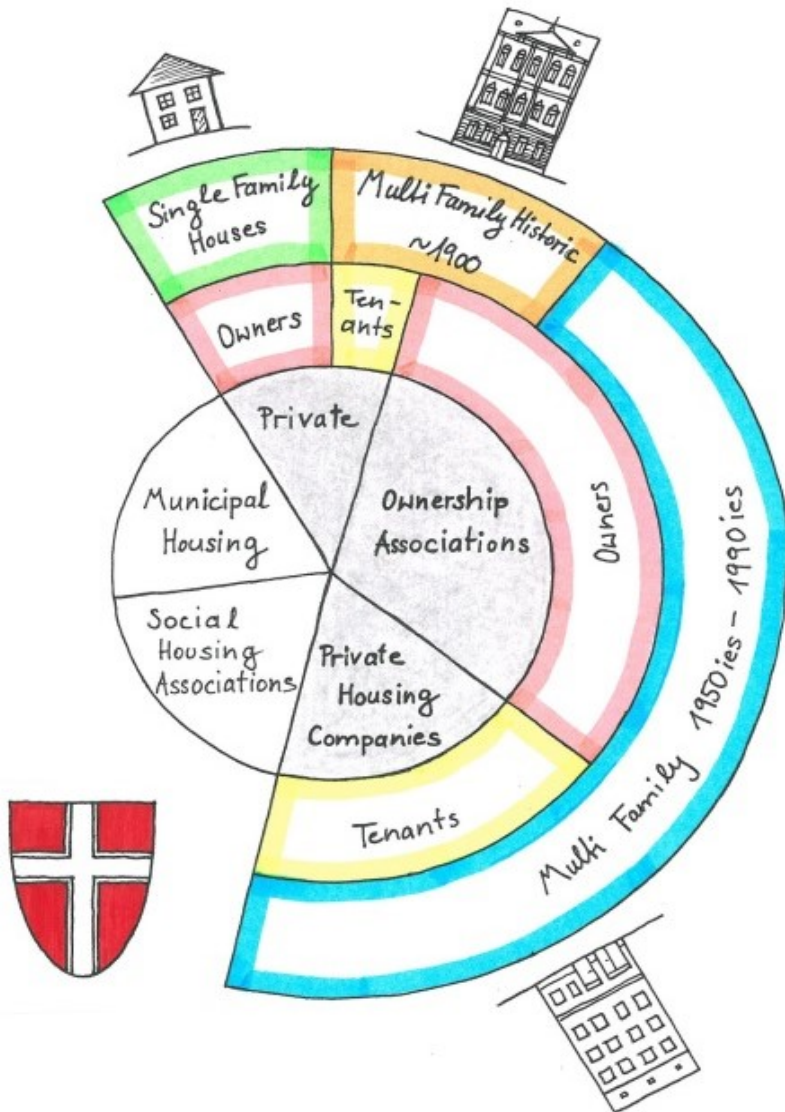
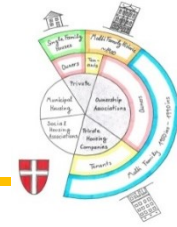
Forum – Energy Efficiency Finance
Market Place in Brussels

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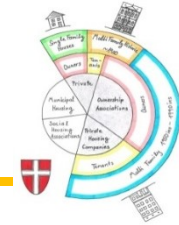
Date

Understanding our target groups



- „I don't know what to do“
- „I don't want to deal with this mess
- „This will ruin me“

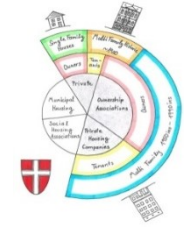
Understanding our target groups



	1-2 family houses	Gründerzeit	Multi-family
# of buildings	89,800	23,700 total 14,400 Zinshäuser 9,300 Condominiums	35,600
# of dwellings	96,000	312,000	576,000
# of buildings built before 1990	66,000		28,900
Average costs for deep renovation	600 €/m ² (+ 90 €/m ²)	450 €/m ² (+ 75 €/m ²)	350 €/m ² (+ 70 €/m ²)

Residential buildings in Vienna (Source: Statistik Austria, Otto Immobilien, own calculation;
+ xxx €/m² refers to additional costs for renewal of the heating system)

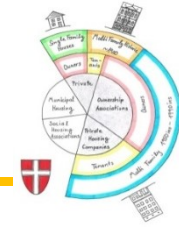
We do care in Vienna how people are living, **standards of housing**, and how **environment** and **climate** is effected



© Timo Huber + Partner Architekten

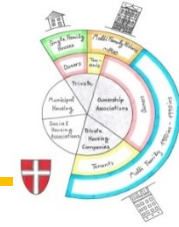
1970ies – 1990ies – 2020
next?

Understanding the market

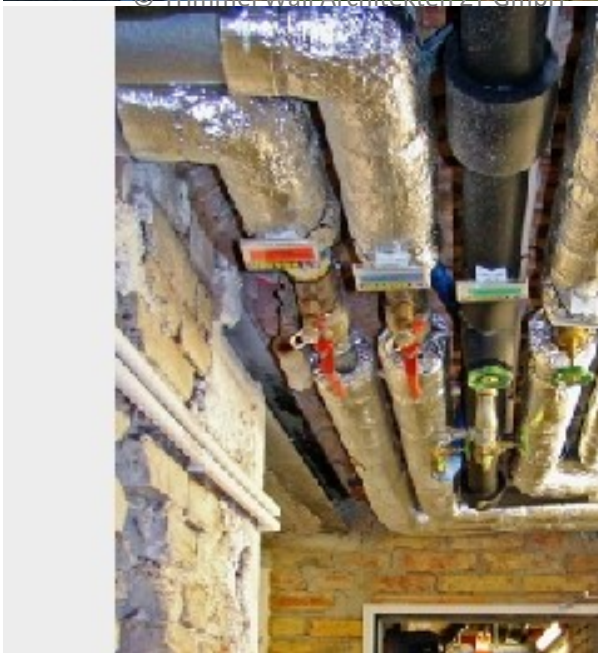


- New-build vs. refurbishment
- Economy of scale, from private to commercial
- Owner/user issues
- Block & neighbourhood focus

Current Issues



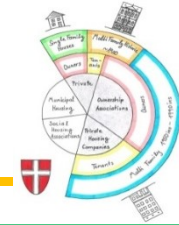
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© wohnfonds wien

- Urban Heat
- Ageing society
- Management optimization
- Energy supply systems
- Resilience and life-cycle costs
- Circular economy
- ... *mastering complexity*

Framework and Aim of the Project



Climate Goals – decarbonisation of the building sector

Setting-up One-Stop-Shop

1,9 Mio. Euro
Horizon 2020
LC-SC3-EE-2-2018
3,5 years

Target group:
private property

EU-Project
RenoBooster

„One-Stop-Shop“

Bundeling of services,
city contacts

Connecting,
Partnerships
„quality network“

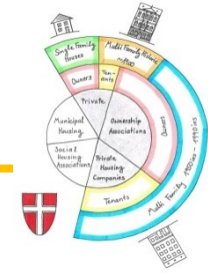
Competent
Independent

**Increase of quality
and quantity of
private renovations**

+ min. 110 Mio. €/a
- 1,000 t CO₂/a ; 5 GWh
>2,000 professionals
40 houses in test phase
...

result

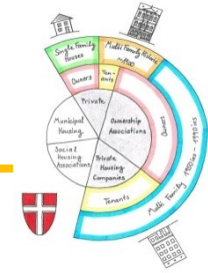
Some context for financing



Austrian context on housing

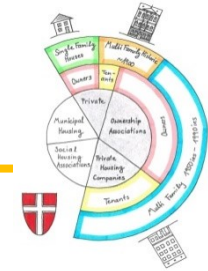
- Reglemented rents pre 1945 + sub-standard, old contracts
- Rents can only be raised for proved maintainance or improvements (conventional energy-eff.)
- Decision making in condominiums
- Building financial reserves per house ...
- Loans are on owner-community and not individual

Financing Issues



- Requirements for Equity at home (20% etc.)
- Risk and payback possibilities for private owners
loan flexibility, loan period
- Risk assessment for banks
Guarantees?, Quality Check by Hub?
- Bank system liquidity?
Public loans...
EIB leverage as multiplier...

Public subsidies – *Lacking attractiveness*



➤ Thermic-energetic Refurbishment – since 1999!

Min 1,65 x low-energy-building – 60 to 170 €/m² + 30 €/m² facilities

3 out of 5 energy-efficiency measures

Circa Minus 70% Energy *demand*

➤ Base-refurbishment

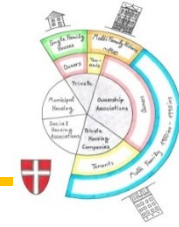
25% public loan – 1% interest

75% bank with annuity-support
(e.g. 40% of payback)

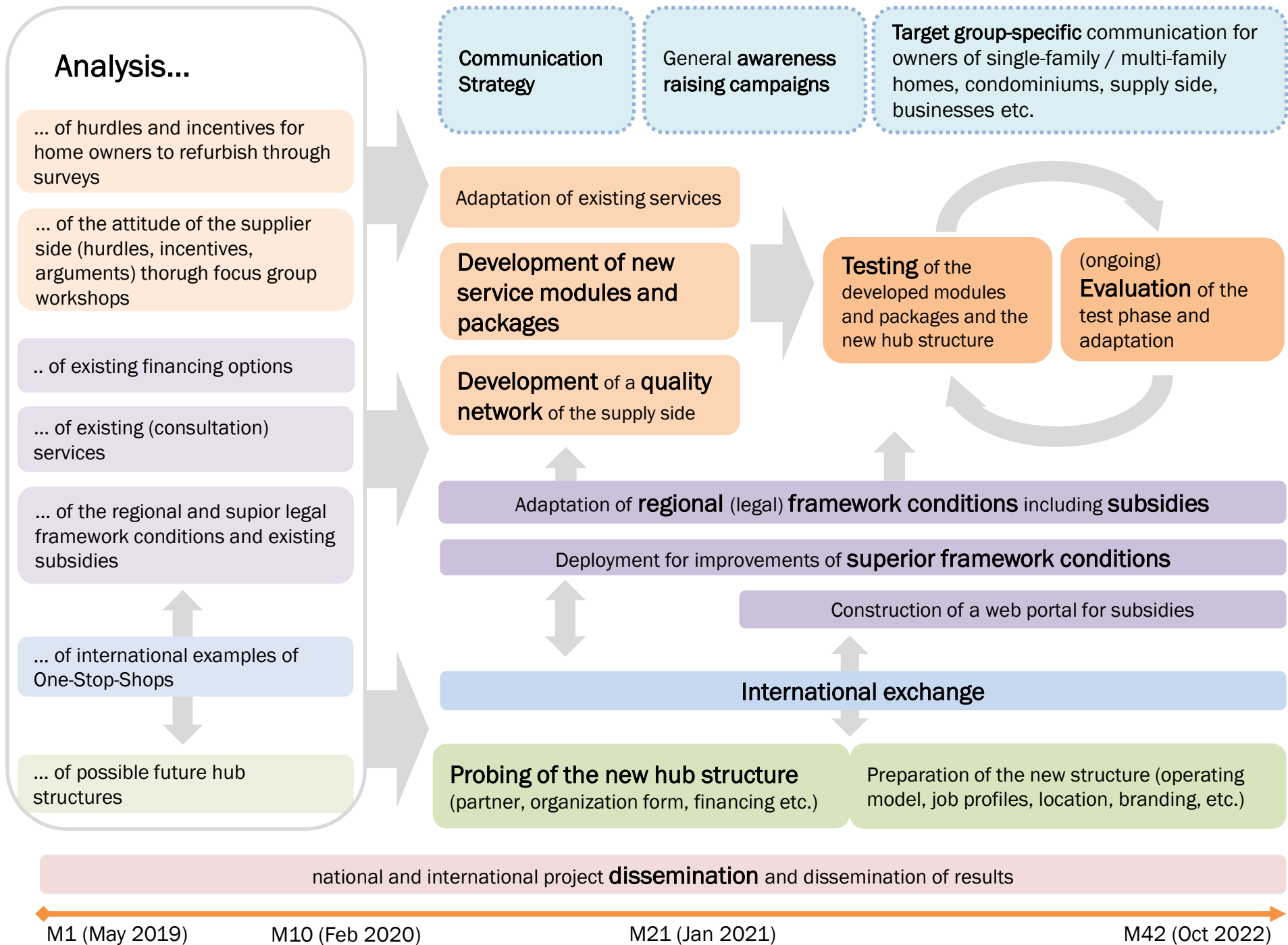
300,000 apart. units since 1984!

15 y. no profit + allocation of apartments by City





Annex with Project Infos



Project Consortium

