

Integrated solutionS for ambitiOus
energy refurbishment of priVATE housing



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“Local Authorities as enablers
for the Success of One-Stop-Shops
for Energy Refurgishments”

Presentation by:
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Energy Cities Hon. Representative for Greece and Cyprus

Aradippou-Cyprus One-Stop-Shop, EU Affairs Office Advisor

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financingbuildingrenovation.eu

INNOVATE : Who we are, our Consortium

Project coordinator : Energy Cities
Vesta Conseil et Finance (FR), Experienced Partner, pls. refer also to JRC report
Aradippou Municipality (CY), Learning Partner
Brussels Environment (BE), Experienced Partner
AGENEX (ES), Learning Partner
Frederikshavn Municipality (DK), Experienced Partner
Heerlen Municipality (NL), Learning Partner
KAW (NL), Experienced Partner, pls refer also to JRC report for Reimarkt project
Linnaeus University (SE), Learning Partner
Litoměřice Municipality (CZ), Learning Partner
Mantova Municipality (IT), Learning Partner
Parity Projects (UK), Experienced Partner, pls refer also to JRC report
Riga Energy Agency (LV), Experienced Partner

Innovate: Who we are, what we aim at, how we'll achieve it

- **INNOVATE** brings together a strong consortium of 13 partners coming from 11 EU Member States (FR, NL, DK, BE, LV, CZ, CY, SE, IT, ES and UK). The consortium is coordinated by Energy Cities, a European network of more than 1.000 local authorities in energy transition.
- We aim at overcoming market barriers to **deep energy-efficient retrofits of private housing stock** and launching ambitious energy retrofit pilot programmes aiming at min. 50% energy savings in 11 target territories.
- This will be done by developing and rolling out **integrated energy efficiency (EE) service packages**
- **Integrated energy efficiency service packages** to be offered through **One-Stop-Shops**



<http://www.financingbuildingrenovation.eu/>

Presenting the Country – Island of Cyprus at the Southeastern corner of Europe



Cyprus



Capital: Nicosia

Geographical size: 9 251 km²

Population: 847 008 (2015)

Population as % of total EU population: 0.2 % (2015)

Gross domestic product (GDP): € 17.421 billion (2015)

Official EU language(s): Greek



Map sources:

1. <http://europa.eu/about-eu/countries/>
2. <http://eservices.dls.moi.gov.cy/#/national/geoportalmviewer>



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A Proud Member of Energy Cities

Introducing Aradippou in Cyprus



- An active member of Energy Cities
- A project applicant for the Juncker Plan

Brussels, June 2014

Aberdeen, April 2015



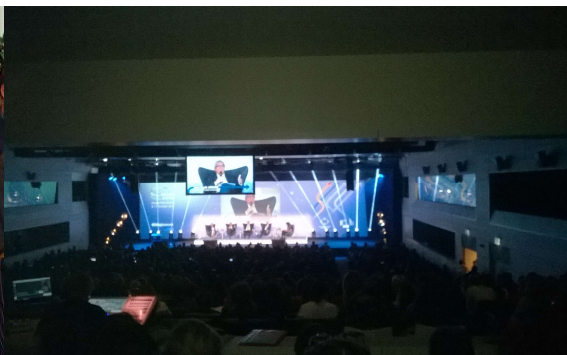
Brussels, April 2015



Brussels, October 2018



Ljubljana, October 2018



Aradippou Smart Industrial City strategy

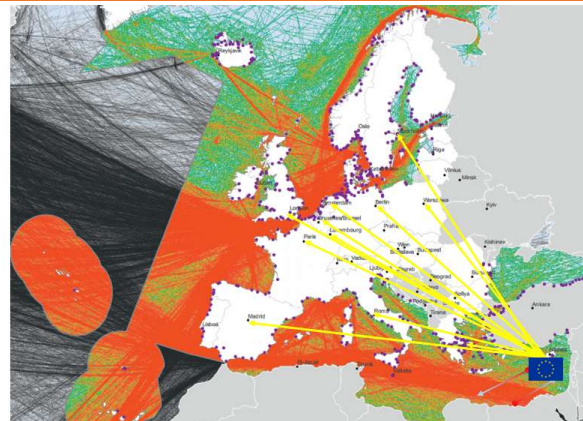
Thematic axes of high priority for Economic Development

City in Facts and figures

Approx. 10 Km from
Larnaca International Airport
and 5 Km from Larnaca port

First EU airport-industrial-zone met
by ships crossing the Suez

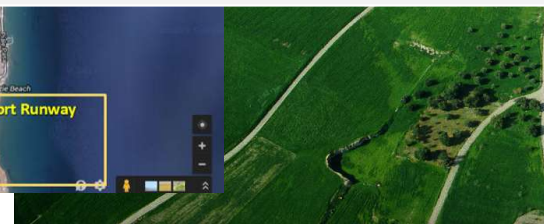
Area: 173 sq. Km
(second largest Municipality in area in Cyprus)
Population: 19,500
Host of the Aradippou Industrial Zones



SUSTAINABLE ENERGY – SMART GRID

FREIGHT AND SMART LOGISTICS OPERATIONS

**REAL ESTATE-BUSINESS AND CONFERENCE
CENTERS**



Learning partners in the Horizon 2020 INNOVATE project : One-Stop-Shops for deep energy efficiency investments



IN A NUTSHELL

INNOVATE – We are developing attractive energy retrofit packages for homeowners



THE ISSUE

For homeowners, the **energy refurbishment** process is unclear. For some, it is not obvious why saving energy is important. They ignore the multiple benefits of energy refurbishments. Positive return on investments, increased property value, thermal comfort... Others are aware, but do not know what measures they can take, how to finance them, who to contact and how to start. Moreover, renovation costs compete with other household investment priorities such as buying a new car or remodelling their kitchen. Often the energy renovation process stops at a planning stage.

OUR SOLUTION

INNOVATE partners want to motivate homeowners to carry out deep energy retrofits of private residential buildings – single family houses and condominiums. In order to facilitate the process, they will develop and roll out attractive **energy retrofit packages**, ideally offered in one location – a **one-stop-shop**.



The service packages will include:



Key business partners

- Cooperative Central Bank;
- Larnaka Chamber of Commerce and Industry;
- Electricity Authority of Cyprus.

Website links

- Aradippou as a smart city
- Aradippou Municipality

Contact

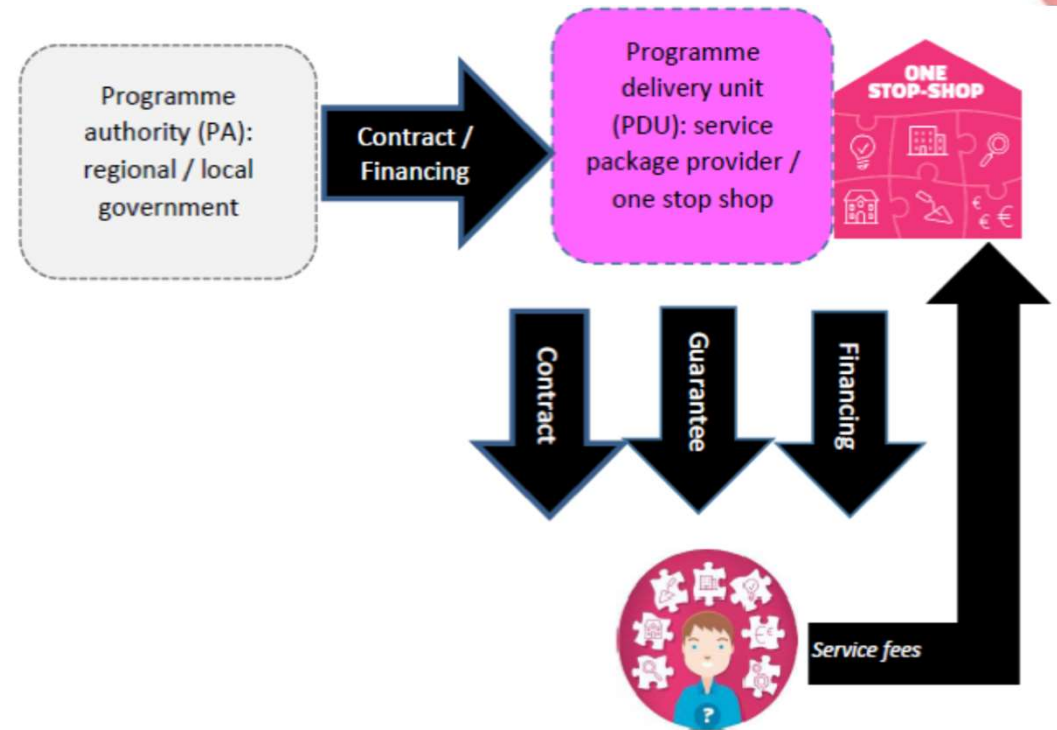
Dr. Panayiotis Michael
EU Affairs Office Aradippou Municipality

INNOVATE Business Models

Development model

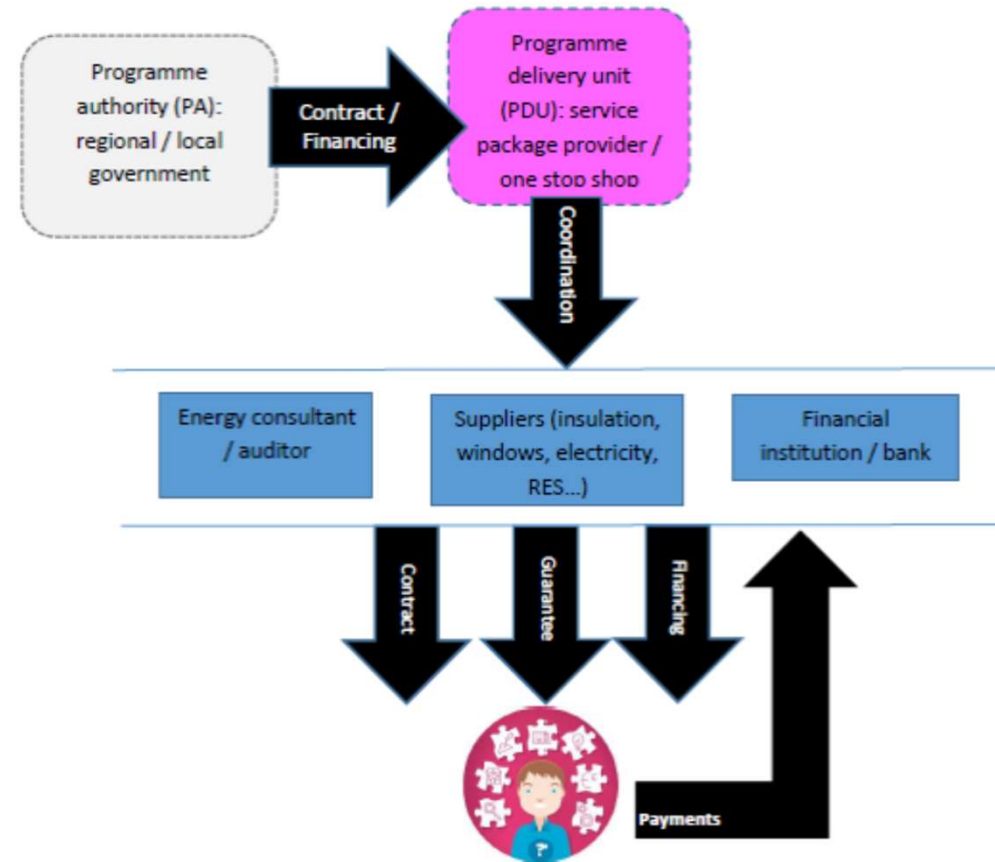
Parity Projects (UK), KAW-Reimarkt (NL)

It offers an integrated EE service package under their own name and responsibility (the main difference compared to the Coordination model). OSS holds complete control over the process and thereby customer experience.



INNOVATE Business Models

Coordination model preferred by Agenex, Litomer preferred by Linnaeus University, Heerlen, Brussels Environment, Aradippou, Frederikshavn, Riga and Mantova



Value Proposition of Aradippou OSS

The OSS will be providing to Citizens:

- Information and guidance on how to benefit from Energy Efficiency investments.
- Connection to Banks and Constructors through the Chamber of Commerce, monitoring the quality of the offered services through the Open Door policy of the Mayor and the Municipality to Citizens.
- Scientific Methods measuring and modelling energy performance in the long run.
- The OSS will help Citizens customize an NZEB Roadmap issuing a Building Renovation Passport for their project, plan for Municipal Grant Schemes and inform about Grant Schemes available through the Ministry of Energy, Commerce, Industry and Tourism.
- Through the OSS experience and by following the NZEB Roadmap, homeowners can financially benefit from:
 - Increased energy savings
 - Loan interest subsidies equivalent to a 0% interest rate (or up-to)

Aradippou Innovative Financial Tool: Interest subsidies as Municipal Grants to Citizens linked to CO₂ reduction (in tonnes) from their investments in Energy Efficiency and Photovoltaics

Our Goal:

“To accelerate the activity in Energy Efficiency investments allowing Environmental rewards to reach the actual investor who, for the case of private houses, is actually the end-user, the Citizen”

- Grants are linked to tonnes of CO₂ reduced
- Grants subsidize interest in case of a loan towards a 0% interest rate


 Funded by the Horizon 2020 Framework Programme of the European Union

Renovating your home?

Save Energy and benefit from the Municipal Grants of Aradippou Municipality



Photovoltaics + Energy Efficiency actions eligible for Municipal Grants

Photovoltaics + One or more from the following actions:

- ☐ Thermal insulation of floor, roof and walls
- ☐ Sun shades
- ☐ Ventilation systems
- ☐ Change or upgrade of oil-boilers to electric boilers
- ☐ More efficient air conditioning Systems

Grant up to €1500 depending on Energy Savings / Clean Energy produced
+ up to €1500 for interest reduction in case a Bank loan is undertaken




 Information: Clean Energy One-Stop-Shop
 Aradippou Town Hall
financingbuildingrenovation.eu

Draft advertisement for Municipal Newspaper

Transitioning Generic Renovation to Energy Renovation

Promoting Health, Comfort and family Happiness (medical insurance industry)

A list of options from the JRC report for Cyprus
“Long-term strategy for mobilizing investments for renovating Cyprus national building stock”

Cash incentives for Citizens linked to CO₂ tonnes reduced, NZEB Roadmap and investment mobilization

INNOVATE project transforms Town Hall to an One-Stop-Shop

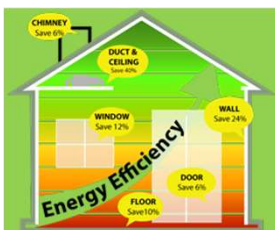


A Proud Member of Energy Cities

Development of a fair Citizens Rewards system when we ask people to invest in energy efficiency and renewables

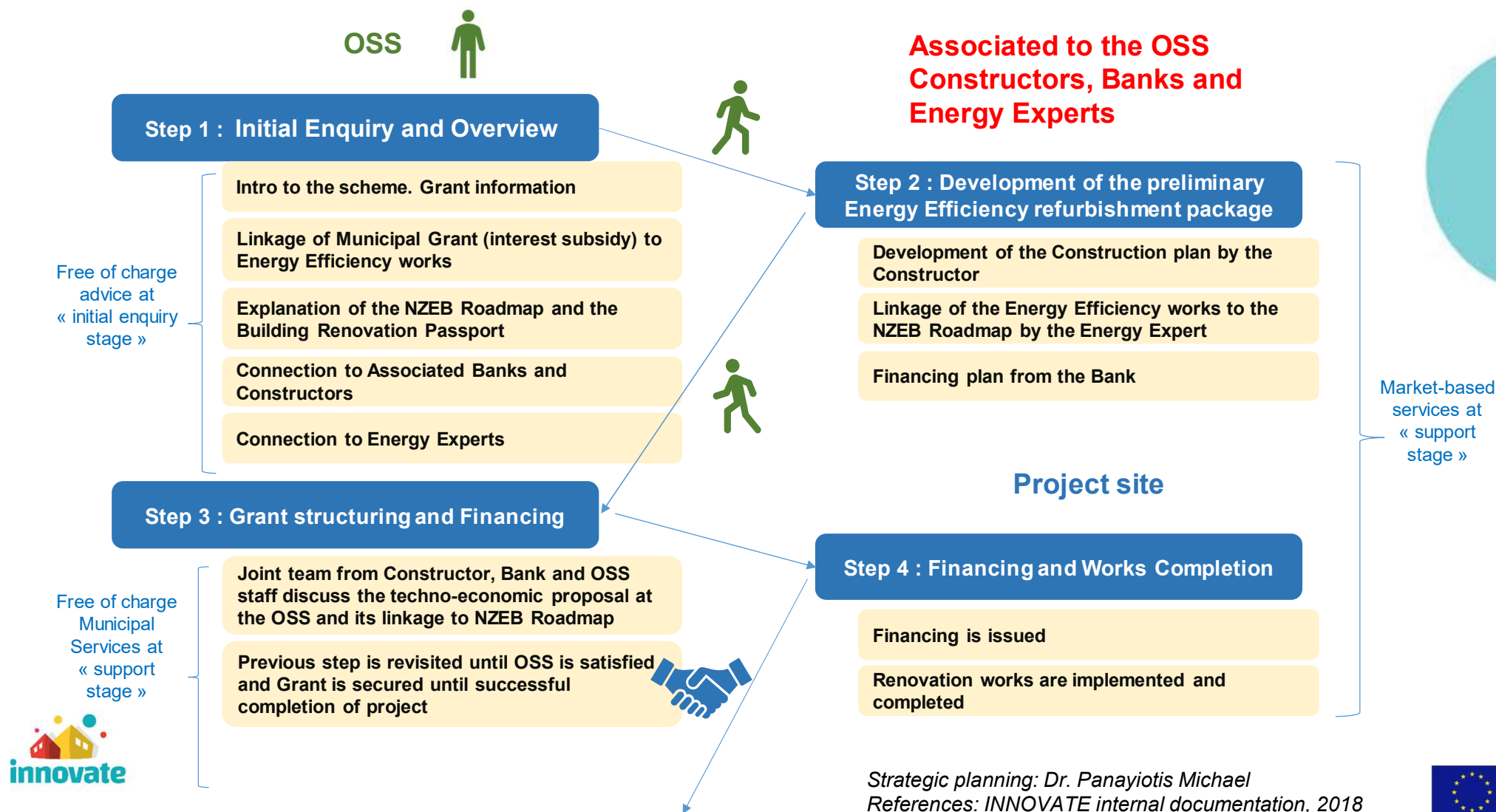


- Environmental Benefits
- Fair Citizen Incentives
- Investment Mobilization



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Aradippou Cyprus Model: Citizen's experience at the OSS



Strategic planning: Dr. Panayiotis Michael
References: INNOVATE internal documentation, 2018

Aradippou Cyprus Model: Citizen's experience at the OSS (cont.)

Step 5: Successful Completion Audit

OSS audits the successful completion of works

OSS receives Energy Performance Certificate from the Energy Experts of the project

OSS marks the Energy Efficiency steps performed towards deep energy retrofitting on the NZEB Roadmap and issues a Building Renovation Passport

OSS issues Grant payment subsidizing loan interest based on the depth of energy retrofitting achieved

Interest subsidy



Step 6 : Post-renovation energy monitoring

As part of the NZEB Roadmap and Renovation Passport agreement between the Citizen and the Municipality, the OSS monitors with scientific tools the energy performance of the building for the following years, supporting the Quality Assurance framework of the OSS

Post-renovation energy monitoring



NZEB Roadmap and Renovation Passport

Στόχος χάρτη πορείας: κτίρια με σχεδόν μηδενική κατανάλωση ενέργειας

Roadmap Aim: Nearly Zero Energy Buildings

Strategic planning: Dr. Panayiotis Michael

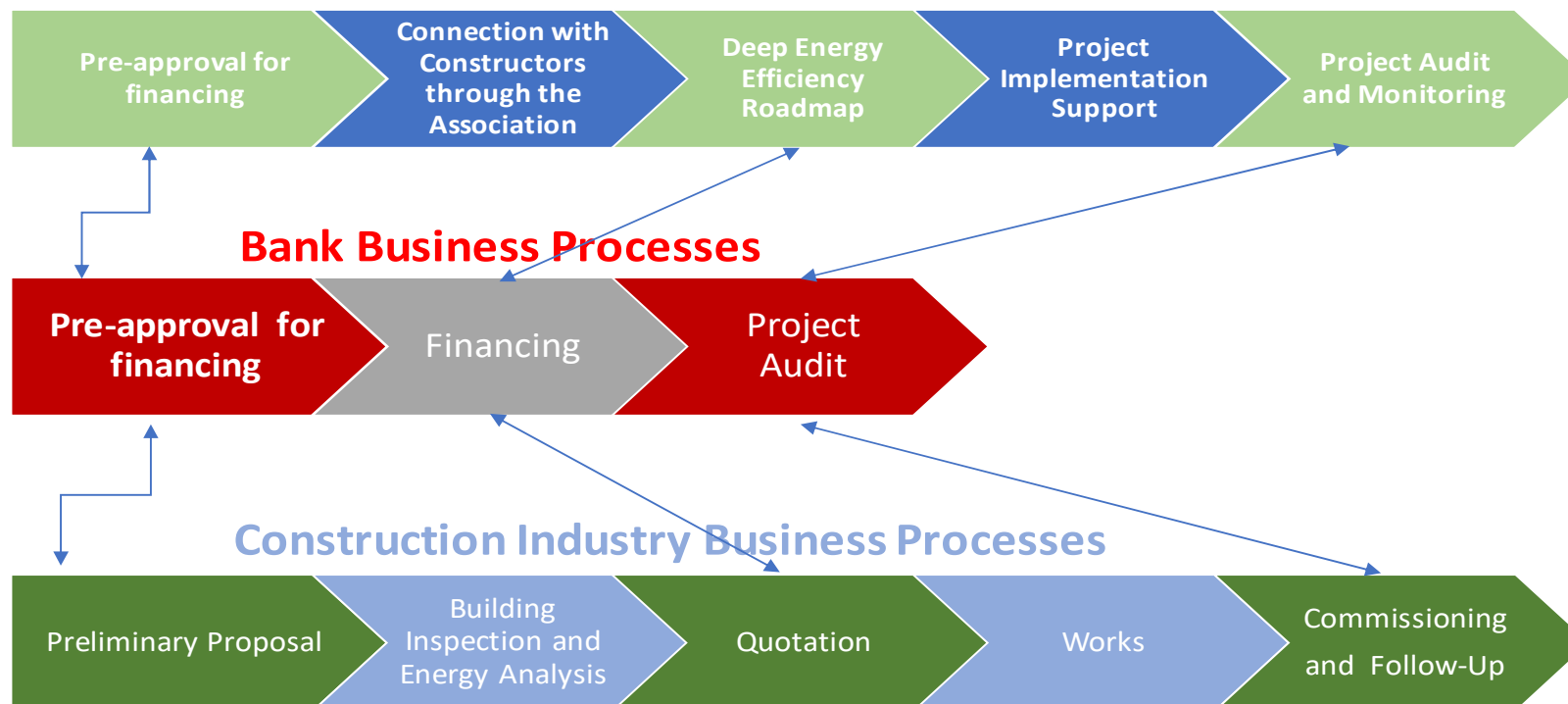
References: INNOVATE internal documentation, 2018

Free of charge
Municipal
Services at
« support
stage »



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Aradippou Clean Energy One-Stop-Shop Business Processes



Aradippou OSS is based on a system of 3 chains of business processes

Strategic planning: Dr. Panayiotis Michael

References: INNOVATE internal documentation, 2018

Aradippou OSS Business Model Canvas

Key Partners <ul style="list-style-type: none"> • Municipality Departments • Ministry of Energy Commerce, Industry and Tourism of Cyprus • Larnaka Chamber of Commerce and Industry • Association of Suppliers/Constructors • Association of Banks • Civil Society Organisations 	Key Activities <ul style="list-style-type: none"> • Municipal Subsidies • NZEB Roadmap assistance • Consultation Key Resources <ul style="list-style-type: none"> • Trusted environment of the Municipality • Excellent relationships with Associations of Constructors and Banks through the Larnaka Chamber of Commerce and Industry 	Value Proposition <ul style="list-style-type: none"> • Implementation of NZEB Roadmap with a Building Renovation Passport • Increased Energy Savings • Quality Monitoring • Interest rate subsidies towards a 0% interest rate 	Customer Relationships <ul style="list-style-type: none"> • One-by-one consultation on the implementation of the Municipality's services Channels <ul style="list-style-type: none"> • Direct Citizen visits to the OSS at the Town Hall – at orientation stage • Citizen Visits to the partners' premises (Constructors, Banks) – at accompaniment stage 	Customer Segment (characteristics of a single segment) <ul style="list-style-type: none"> • Middle to Higher Income Households • Ready to invest in Household Maintenance • Willing to undertake a loan and have a banker • Can understand the economic and environmental benefits of investing in Energy Efficiency • Still request grants if they exist • Somehow negotiate interest rates
Cost Structure <ul style="list-style-type: none"> • Usage of Municipality's infrastructure • OSS to be run by the European Affairs Office team of the Municipality 			Revenue Streams <ul style="list-style-type: none"> • Free service for Citizens, financed by the Municipality at start-up phase • Fees from Innovation activities (e.g. financial tools innovation) when at large scale phase 	

Alexander Osterwalder, Yves Pigneur, Alan Smith, and 470 practitioners from 45 countries. 2010
 Referenced by: Boza-Kiss Benigna, Bertoldi Paolo, *One-stop-shops for energy renovations of buildings*, European Commission, Ispra, 2018, JRC113301

Securing Political Support:

The positive impact of the INNOVATE meeting in Aradippou

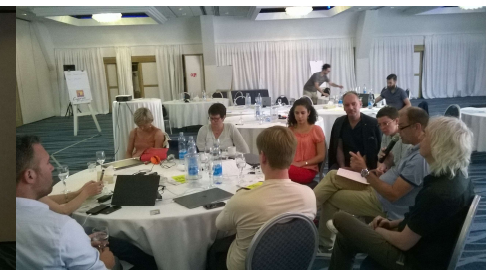
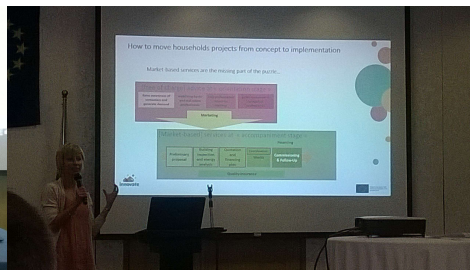


INNOVATE partners welcomed by the Mayor and the Municipal Council at the Aradippou Town Hall and the Conference Venue



Ms Jana Cicmanova of Energy Cities presents INNOVATE to the Minister of Foreign Affairs of Cyprus Mr. Nicos Christodoulides in the presence of Aradippou Mayor Mr. Evangelos Evangelides and the Mayor of Pylos-Nestor Mr. Dimitris Kafantaris, President 'Sustainable City' Network.

Honoring INNOVATE efforts in Aradippou, Cyprus 3rd Steering Committee meeting, May 2018



Securing Political Support



June 22, Interview of Mayor of Aradippou to media

Question: What are the goals of the INNOVATE programme which you have recently hosted in Aradippou?

INNOVATE project will implement an innovative idea where the Municipalities of the European partners of the project, Aradippou being one of them, will establish One-Stop-Shop offices for Clean Energy (and Energy Efficiency).

Available online at:

<http://www.philenews.com/koinonia/anthropoi/article/544173/pente-lepta-me-ton-evangelos-evangelidi>

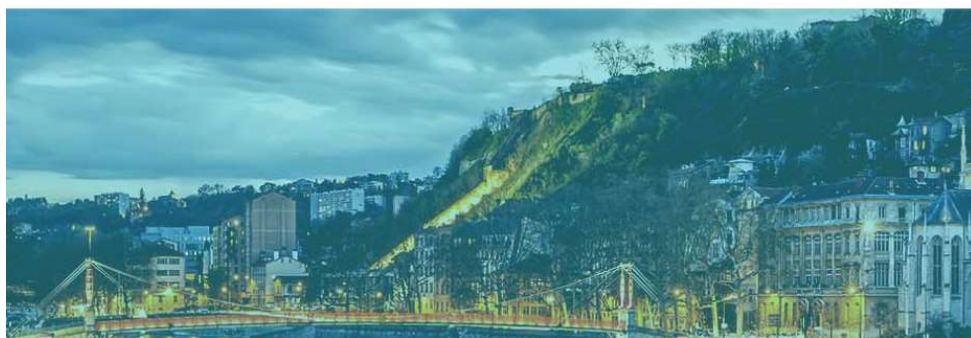
References to Aradippou from major European Cities

Smart Cities Vienna, Munich, Lyon

<https://www.smarter-together.eu/news/successful-conclusion-1st-innovate-smarter-together-workshop-focusing-one-stop-shops-deep>



About Cities Club of cities What's new Media Contact



Successful Conclusion of the 1st INNOVATE – Smarter Together Workshop focusing on 'One-Stop-Shops for Deep Energy Retrofits' and 'Holistic Refurbishment in Smart Cities'

05 June 2018

INNOVATE and Smarter Together project delegates successfully concluded their joint Workshop in Aradippou, Larnaka District, Cyprus. The Workshop was under the auspices of the Mayor of Aradippou Mr. Evangelos Evangelides.

The Smarter Together Club of Cities – Horizon 2020 project (<https://www.smarter-together.eu/>) of the European lighthouse cities Vienna, Munich and Lyon, the follower cities Santiago de Compostela, Sofia and Venice and the observer cities Kiev and Yokohama, was represented in the Workshop by the City of Munich, by Ms Hana Riemer and Ms Verena Stoppel and by the City of Vienna, by Dr. Bojan-Ilija Schnabl.

Smart City Vienna



arter Together und INNOVATE in Aradippou (Open)

agung zu Modellen der Wohnhaussanierung

Wiener Modell der integrierten „Sanften Stadterneuerung“ Ein europäisches Zukunftsmodell

20. Mai bis 1. Juni 2018 fand auf Initiative von „Energy Cities“ und der österreichischen Gemeinde Aradippou in der Hafenstadt Larnaka die erste gemeinsame Konferenz der Europäischen Smarter Together und INNOVATE statt.

Fokus standen Lösungsmodelle für eine verstepite ökologische Sanierung von Wohnhäusern.

verstepte die „Sanfte Stadterneuerung“, die in ihren erfolgreich seit mehr als 20 Jahren eingesetzt wird, durch eine massive Lösungsmatrix für jene Städte und Länder, die vornehmlich einen privaten (Wohnparken) Wohnhausbestand haben.



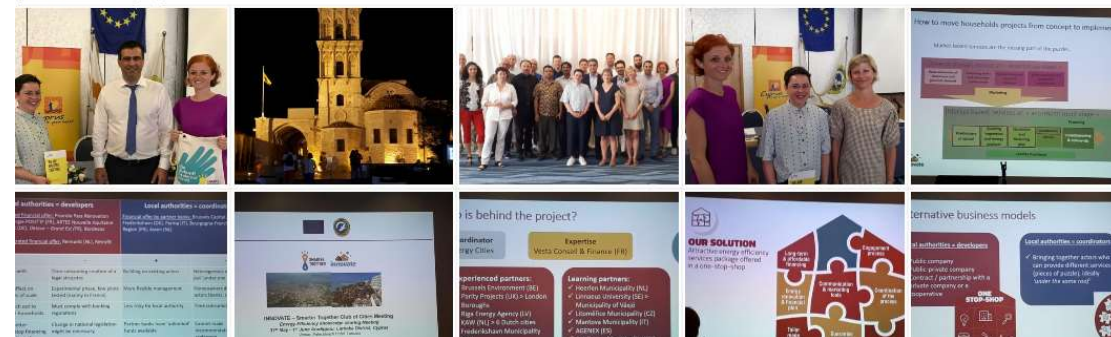
Teilnehmer der gemeinsamen Tagung INNOVATE – Smarter Together in Aradippou, Larnaka District

ökologische Wohnhaussanierung: Eine Notwendigkeit zur Erreichung der Klimaziele

In für die Europäische Kommission ist klar, dass die ökologische Sanierung von Wohnhäusern ein wichtiger Beitrag ist und werden soll. Innovative Ansätze werden im Rahmen des Forschungsprogramms Horizon 2020 speziell gefördert. Zwei Projekte führen dazu in Larnaka einen fruchtbareren Austausch zwischen Together und INNOVATE.

arter Together verfügt über einen breiten Ansatz einer umfassenden Stadterneuerung und ist aktuell in Umsetzung. INNOVATE fokussiert auf Sanierungsmodelle zur Sanierung von privaten Wohnhäusern – Einfamilienhäuser ebenso wie Mehrfamilienhäusern und insbesondere in der (Wohnungs-) Sanierungsbranche. Im Rahmen von INNOVATE wird „One-Stop-Shops“ eingerichtet, die ein gebündeltes Service anbieten und damit die Sanierungsprozesse vereinfachen sollen. Dabei werden Sanierungs- und Koordinationsdienstleistungen mit oder ohne Finanzierungsmodell angeboten, d.h. dass die lokale Einrichtungen (One-Stop-Shops) als Initiator oder als Koordinator auftreten.

pressionen von der Tagung





THIS SMALL TOWN MODEL WILL HELP YOU BOOST ENERGY EFFICIENCY ACTIONS IN BUILDINGS!

By Sara Giovannini on 5 November 2018

Located at the outskirts of Larnaca (Cyprus), Aradippou is a small town with a big vision. Thanks to its size, its homogenous building stock and its Mayor's ambitious vision, the city is testing innovative financing solutions in energy efficiency.



The municipality has already set up a soft loan scheme for photovoltaics in collaboration with the Cyprus Cooperative Bank. Through its participation in the Horizon 2020 INNOVATE project, Aradippou wants to develop a similar financing scheme for energy efficiency. The city also wants to set up a One-Stop-Shop service with public and commercial partners. This service will guide citizens throughout their energy efficiency renovation process.

A One-Stop-Shop for energy renovation

Source: <http://www.energy-cities.eu/This-small-town-model-will-help-you-boost-energy-efficiency-actions-in-5259>

Energy Cities in Europe

WELCOME TO NEWEST MEMBERS:
Krizevci Croatia | Sustainable City Network (GR)
Greece | CEDEF-Central European Development Forum (RS) Serbia | Albertville France | Union of Communities of Armenia (AM) Armenia

Latest opinions

- Recommendations for an Effective and Inclusive Clean Energy Transition Sub-Programme within LIFE 2021-2027 - December 2018
- Recommendations for the vote in ENVI Committee on the proposal for a regulation establishing a Programme for the Environment and Climate action (LIFE) - November 2018
- Towards an EU budget that will serve to achieve Europe's climate objectives - October 2018

Events to come

Government of Mayors webinar - Adaptation #1

Conclusion:

Local Authorities can be catalysts for the success of One-Stop-Shops

- Quality Assurance, Verification and Incentives to Citizens to accelerate investments in Energy Efficiency through One-Stop-Shops

This is based on:

- Trust of Citizens to Local Authorities
- Covenant of Mayors. Commitment to protect the Environment
- Effort to be on track for Energy Efficiency EU targets of 2020 (20%), 2030 (32.5%)
- Interest on the growth of the local economy on the basis of environmental sustainability



Setting up innovative
energy efficiency service packs
for home renovations



Thank You

Dr. Panayiotis Michael, PhD/MBA UC Los Angeles
Energy Cities Hon. Representative for Greece and Cyprus

Aradippou-Cyprus One-Stop-Shop, EU Affairs Office Advisor

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