# EPC, CROWD-INVESTING and MICROLOANS, and INTERNAL CONTRACTING

## Welcome to the first PROSPECT+ Replication Webinar

**SELNICA OB DRAVI**
**Vlasta Krmelj**

**KRIŽEVCI**
**Sanela Mikulčić Šantić**

**ALBERTVILLE**
**Sandrine Deternay**

**Vlasta Krmelj** will explain how the Municipality of Maribor refurbished 24 public buildings **using EPC (working with ESCOs).**

**Sanela Mikulčić Šantić** will introduce a **crowd-investing project that allowed Krizevci to mobilise funds for a photovoltaic installation on a municipal development centre**.

**Sandrine Deternay** will share insights into Albertville City's approach to energy savings, emphasizing **actionable steps and internal fund rotation to finance energy-saving measures**.

PROSPECT+

**Capacity building for cities and regions - from learning to action!**

Prospect+ Policy Dialogue Webinar

# Replication Webinar

Sylwia Slomiak

EUROCITIES

The PROSPECT+ project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101023271

28 February 2024

# What do we do for public authorities?

PROSPECT+

## Capacity-building through peer-learning

(online, study visits, Masterclasses, Community of Practice)


## Innovative Financing Instruments:

- Citizens Finance (crowdfunding and cooperatives)
- Energy Performance Contracting (EPC)
- Internal Contracting
- Green Bonds
- Guarantee Funds
- Soft Loans
- Revolving Funds
- Third Party Financing

# Prospect+ Community of Practice and Policy Dialogue


Everyone who would like to learn more about the innovative financing instruments and examples of successful projects at their own pace can join our Community of Practice!

REGISTER HERE

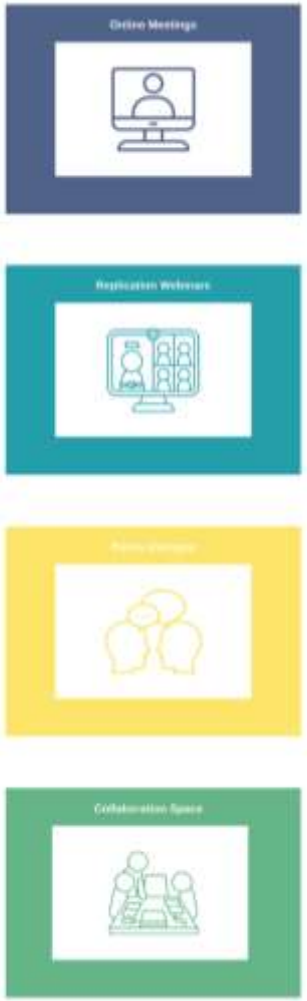
The Members of the Community of Practice (CoP) join various online meetings and webinars where they hear and talk about the most interesting examples of best practices from PROSPECT+ mentors and mentees and invited guests. They also have an opportunity to share their experience and contribute to the policy feedback, in order to bring attention to the difficulties and needs affecting public authorities when they use innovative financing instruments.

## Why join the Community of Practice?

Interested in innovative financing and looking project success stories or happy to share your experience? Since we launched the CoP, we've fostered enriching online discussions and established a collaboration space.

## What role can you have in our Community of Practice?

- **Active**: for those members who would like to take an active part in discussions, share their organisation's experience and provide input to policy feedback.
- **Observer**: for those who would like to participate in webinars and receive information on best-practices.
- **Expert**: for those who would like to provide expert input on the application of innovative financing instruments or policy context.





For more information go to www.h2020prospect.eu/community-practice

# LAST CHANCE TO JOIN THE PROJECT

## Don’t miss the last chance to join:

Last opportunity to join the last learning cycle that starts in May (including free study visits) – apply by 15 March 2024:
Get Involved

## Who is eligible?

Representatives of public authorities and municipal energy agencies endorsed by the mayor, deputy mayor or CEO.

www.h2020prospect.eu

# GET A FLAVOUR OF THE MENTORING PROGRAMME

## Learn from our mentors:

**SELNICA OB DRAVI**
**Vlasta Krmelj**

**KRIŽEVCI**
**Sanela Mikulčić Šantić**

**ALBERTVILLE**
**Sandrine Deternay**

PROSPECT +

Capacity building for cities and regions - from learning to action!

## Good practice

# EPC in MARIBOR, SLOVENIA

**Dr. Vlasta KRMELJ, Director**
**Energy and Climate Agency of Podravje**
**Vice –president of FEDARENE**

**ENERGAP - PROSPECT+ partner and mentoring agency**

energap
Energetsko podnebna agencija za Podravje

The PROSPECTplus project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 101023271

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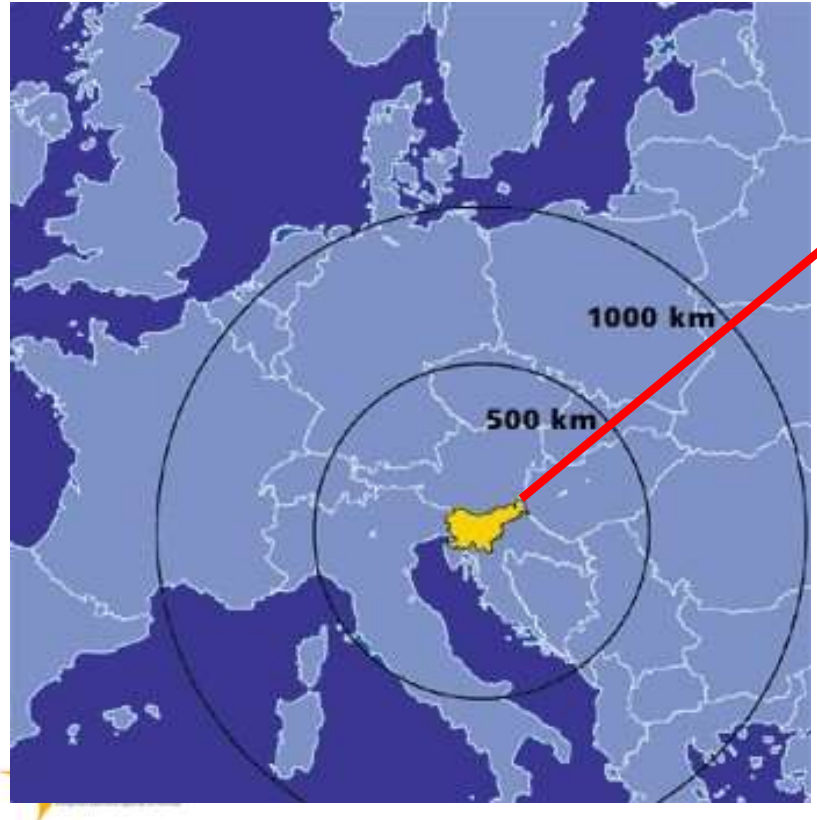



# ENERGY AND CLIMATE AGENCY OF PODRAVJE

PROSPECT+

## CLIMATE AND ENERGY TRANSITION IN PODRAVJE REGION

- Energy management in public sector (planning (strategies, action plans) and implementation
- Preparation of investment documentation for energy projects (Cost benefit Analysis)
- Financial planning of energy projects
- Implementing different financial mechanisms (PPP, EPC, EU funds,..), public procurement procedures, negotiations, ...
- Educational and communicational activities for different target groups
- Citizens advisory services

# STAKEHOLDERS

- Municipalities
- Public buildings managers, public communal services (waste management, waste water, public lighting, district heating)
- Users
- University of Maribor, Chamber of Commerce in the region and in Slovenia, Chamber of crafts
- Professionals, experts, University Hospital Centre in Maribor
- Ministries, EU organisations, institutions, partners
- ESCO companies, clusters

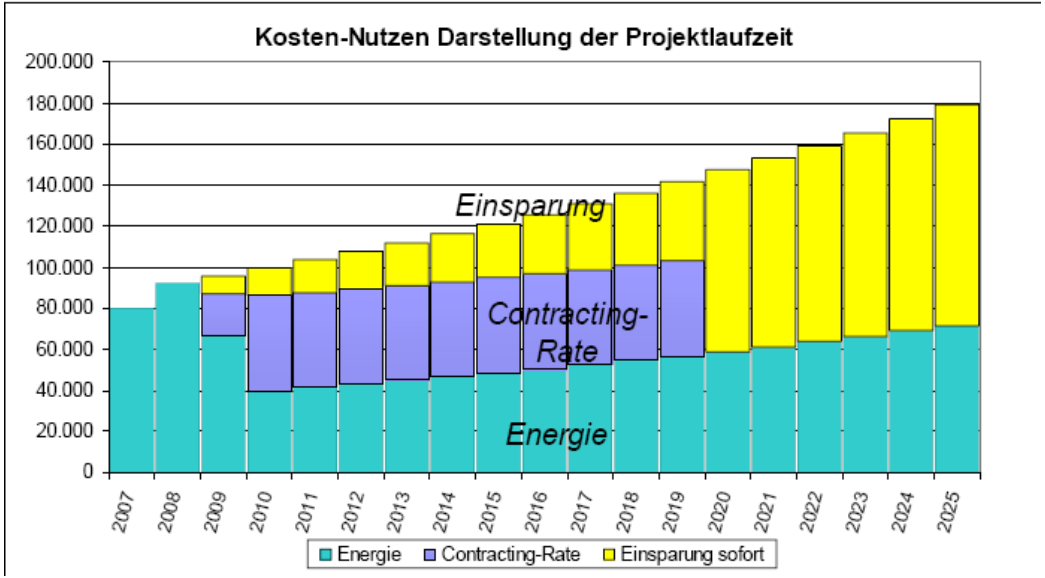
**LESSON 1 - Team work**

- Working with users, step by step, starting with schools, kindergartens, followed by sports objects, cultural, administrative buildings, …
- Stakeholders – from „first coffee to friends“
- City administration staff
- Directors, mayor
- Politicians „year by year, after 4-years mandate all over again“

VIR:https://www.qs.com/qs-world-university-rankings-by-subject-2015-challenges-and-developments/

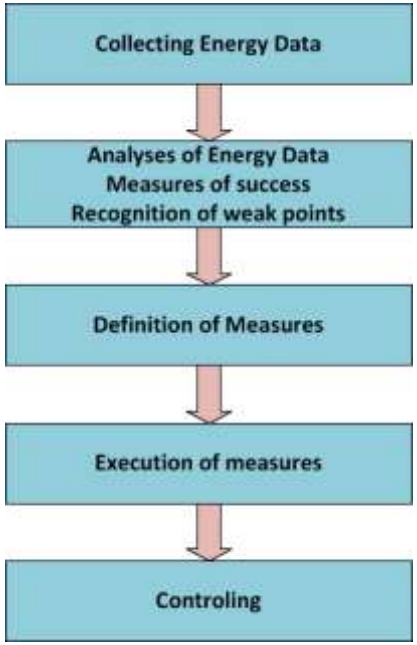
# ENERGY PERFORMANCE CONTRACTING

- No experiences in Maribor
- No knowledge
- New way of thinking
- Not a lot of ESCO
- Traditionally against ESCO and private profit system
- Information, education and training activities, repeating

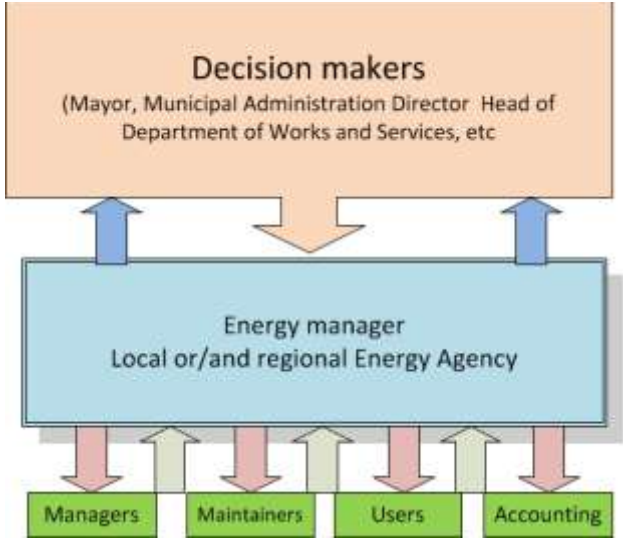


# ENERGY MANAGEMENT

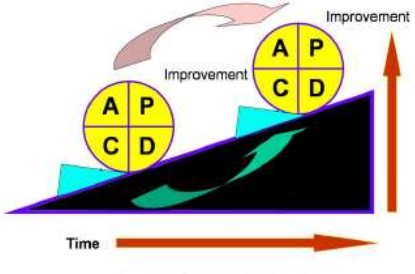
- Analyses of energy supply, consumption and costs (Secure, stabile and quality of energy supply);
- Preparation of RES and RUE measures (Energy Action plan);
- Communication between decision makers and maintainers, accouters, etc;
- Measurements of the Environmental impacts;
- To create long-term strategy on energy management;
- Education, motivate and raise the awareness of all employees;
- Energy audits
- Monitoring - Energy bookkeeping




**LESSON 2 - Introduce energy and climate management step by step**




**PLAN – DO – CHECK – ACT**



# ENERGY REFURBISHMENT OF 24 PUBLIC BUILDINGS IN PPP - EPC

PROSPECT+

- Started in 2015
- No political commitments
- Elections
- Many presentations at City Council
- Political approval in 2017
- Public procurement PPP procedure in 2018
- December 2018 start of the work
- December 2019 end of the work
- Investment 12 mio EUR


https://www.dw.com/en/10-traditional-types-of-german-jokes/a-38144935

# IN PARALEL MAKE ENERGY AUDITS

PROSPECT+

*Tabela 1: Seznam objektov SKUPINE A, predvidenih za celovito energetsko obnovo s pregledom ukrepov*

| Št. | Objekt | Naslov | Predvideni ukrepi | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | *Energetsko upravljanje* | *Prenova ovoja* | *Prenova stavbnega pohištva* | *Izolacija podstrešja, strapa, strehe* | *Vgradnja termostat. ventilov* | *Prenova ogrevalnega sistema* | *Prenova notranje razsvetljave* |
| 1. | Upravna stavba MOM | Ulica heroja Staneta 1 | x | | | | x | x | x |
| 2. | OŠ bratov Polančičev Maribor* | Prešernova ulica 19 | x | x | x | x | x | x | x |
| 3. | OŠ Leon Štukelj Maribor* | Klinetova ulica 18 | x | x | x | x | x | x | x |
| 4. | OŠ Ludvika Pliberška Maribor | Lackova cesta 4 | x | | | | x | x | x |
| 5. | OŠ Martina Konšaka Maribor | Prekmurska ulica 67 | x | x | x | x | x | x | x |
| 6. | OŠ Maksa Durjave Maribor | Ruška cesta 13 | x | | | | x | x | x |
| 7. | OŠ Slave Klavore Maribor | Štrekljeva ulica 31 | x | x | x | x | x | x | x |
| 8. | OŠ Franca Rozmana Staneta Maribor | Kersnikova ulica 10 | x | x | x | x | | x | x |
| 9. | OŠ Malečnik | Malečnik 61 | x | | | | x | x | |
| 10. | OŠ Prežihovega Voranca Maribor | Gosposvetska cesta 10 | x | x | x | x | x | x | x |
| 11. | OŠ Draga Kobala Maribor | Tolstojeva ulica 3 | x | x | x | x | x | x | x |
| 12. | OŠ Rada Robiča Limbuš | Limbuška cesta 62 | x | x | x | x | | x | x |
| 13. | Vrtec Tezno Maribor, PE Pedenjped | Ulica heroja Nandeta 3 | x | x | x | x | x | x | x |
| 14. | Vrtec Pobrežje, PE Grinič | Cesta XIV. divizije 14a | x | x | x | x | x | x | x |

**LESSON 3 – Use real data and information**

# ENERGY, COST AND SAVINGS CALCULATIONS

To have view in savings (kWh, EUR, $CO_2$) potentials and make priorities (benchmarking)

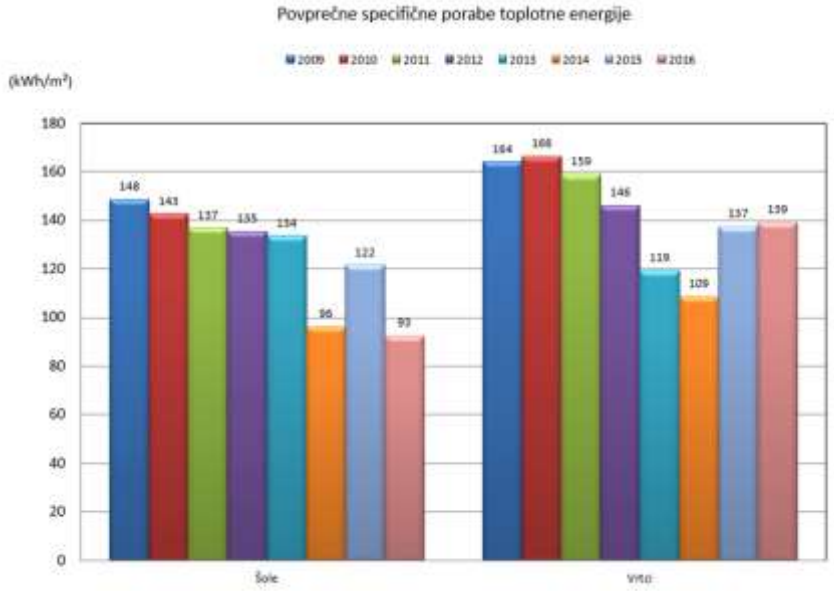



*Tabela 7: Raba energije, stroški za rabo energije in emisije $CO_2$ po posameznih letih, OŠ bratov Polančičev Maribor*

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|
| **Toplotna energija** | | | | | | | |
| **Raba energije v kWh** | 579.044 | 422.932 | 622.613 | 477.397 | 344.052 | 454.289 | 616.115 |
| **Stroški energenta v EUR z DDV** | 40.165 | 35.912 | 60.639 | 47.238 | 33.761 | 37.580 | 45.127 |
| **Proizvedene emisije $CO_2$ v tonah** | 154 | 113 | 166 | 127 | 92 | 120 | 164 |
| **Električna energija** | | | | | | | |
| **Raba energije v kWh** | 128.879 | 125.726 | 127.829 | 127.175 | 124.175 | 129.165 | 134.670 |
| **Stroški energije v EUR z DDV** | 20.005 | 19.446 | 21.417 | 20.284 | 20.118 | 21.338 | 20.993 |
| **Proizvedene emisije $CO_2$ v tonah** | 68 | 67 | 68 | 67 | 66 | 68 | 71 |

Stroški vzdrževanja: 1.500 € letno

*Tabela 8: Predvideni letni prihranki, ki bi lahko bili doseženi po energetski sanaciji, OŠ bratov Polančičev Maribor*

| | Toplotna energija | Električna energija |
|---|---|---|
| **Potencialni prihranki energije v kWh na leto** | 175.278 | 87.433 |
| **Potencialni prihranki stroškov v EUR na leto z DDV** | 14.432 | 14.072 |
| **Potencialno znižanje emisij $CO_2$ v tonah na** | 46 | 46,19 |

# INVESTMENT COST

- On the basis of energy audits and proposed measures – investment costs are calculated

Tabela 37: Ocena vrednosti investicije za celotno operacijo

| OCENA VREDNOSTI INVESTICIJE PO STALNIH CENAH (STAVBE SKUPINA A IN B) | | | | |
|---|---|---|---|---|
| št. | skupina stavb/ukrep | leto 2018 | leto 2019 | SKUPAJ |
| I. | **STAVBE SKUPINE A** | **56.000,00** | **9.453.291,31** | **9.509.291,31** |
| 1. | Pripravljalne in spremljevalne storitve | 56.000,00 | 186.786,70 | 242.786,70 |
| 2. | GOI dela | 0,00 | 9.266.504,61 | 9.266.504,61 |
| I. | **STAVBE SKUPINE B** | **10.000,00** | **1.444.842,38** | **1.454.842,38** |
| 1. | Pripravljalne in spremljevalne storitve | 10.000,00 | 23.213,28 | 33.213,28 |
| 2. | GOI dela | 0,00 | 1.421.629,10 | 1.421.629,10 |
| | **Skupaj brez DDV** | **66.000,00** | **10.898.133,69** | **10.964.133,69** |
| | **DDV 22 %** | **0,00** | **2.390.109,42** | **2.390.109,42** |
| | **Skupaj z DDV** | **66.000,00** | **13.288.243,11** | **13.354.243,11** |
| | **Skupaj z DDV (brez upoštevanja povračljivega DDV)** | **66.000,00** | **10.969.598,49** | **11.035.598,49** |

# INVESTMENT CONCEPT - 1

- Historical data on energy, costs, Co2
- Potential savings in energy, costs and CO2
- Potential sources: municipal budget, loans, public funds, EU, private funds
- Make long and short term scenarios for energy use and costs (including running and maintaining costs)
- Financial flows, cost benefit analysis, including all benefits (staff, development, environment, …)

Tabela 45: Finančna konstrukcija variante po principu JZP, skupaj stavbe Skupine A in B

| | Viri financiranja | 2018 (€) | 2019 (€) | Skupaj | Upravičeni stroški (€) | Neupravičeni stroški brez DDV (€) | Delež vira v % na celoten projekt |
|---|---|---|---|---|---|---|---|
| A | **Pripravljalne in spremljevalne storitve** | | | | | | |
| 1. | *Nepovratna sredstva* | 22.400,00 | 74.714,68 | 97.114,68 | 97.114,68 | / | **0,89** |
| 1.1. | *namenska sredstva EU* | 19.040,00 | 63.507,48 | 82.547,48 | 82.547,48 | / | 54,00 |
| 1.2. | *slovenska udeležba kohezijske politike* | 3.360,00 | 11.207,20 | 14.567,20 | 14.567,20 | / | 6,00 |
| 2. | Lastna sredstva javnega subjekta | 43.600,00 | 135.285,30 | 178.885,30 | 145.672,02 | 33.213,28 | **1,63** |
| | **SKUPAJ BREZ DDV** | **66.000,00** | **209.999,98** | **275.999,98** | **242.786,70** | **33.213,28** | **2,52** |
| | *22% DDV - nepovračljiv (javni partner)* | 0,00 | 38.720,00 | 38.720,00 | | | |
| | *SKUPAJ Z DDV* | 66.000,00 | 248.719,98 | 314.719,98 | | | |
| B | **Gradbena, obrtniška in inštalacijska dela (GOI) - ukrep prezračevanje** | | | | | | |
| 1. | Lastna sredstva javnega subjekta | 0,00 | 148.840,00 | 148.840,00 | / | 148.840,00 | 1,36 |
| | **SKUPAJ BREZ DDV** | **0,00** | **148.840,00** | **148.840,00** | / | **148.840,00** | **1,36** |
| | *22% DDV - nepovračljiv (javni partner)* | 0,00 | 32.744,80 | 32.744,80 | | | |
| | *SKUPAJ Z DDV* | 0,00 | 181.584,80 | 181.584,80 | | | |
| C | **Gradbena, obrtniška in inštalacijska dela (GOI) - ostali ukrepi** | | | | | | |
| 1. | *Nepovratna sredstva* | 0,00 | 3.703.362,66 | 3.703.362,66 | 3.703.362,66 | / | 33,78 |
| 1.1. | *namenska sredstva EU* | 0,00 | 3.147.858,26 | 3.147.858,26 | 3.147.858,26 | / | 54,00 |
| 1.2. | *slovenska udeležba kohezijske politike* | 0,00 | 555.504,40 | 555.504,40 | 555.504,40 | / | 6,00 |
| 2. | Lastna sredstva javnega subjekta | 0,00 | 1.555.744,90 | 1.555.744,90 | 916.582,26 | 639.162,64 | 14,19 |
| 3. | Zasebni partner - JZP | 0,00 | 5.280.186,15 | 5.280.186,15 | 4.638.461,73 | 641.724,42 | 48,16 |
| | **SKUPAJ BREZ DDV** | **0,00** | **10.539.293,71** | **10.539.293,71** | **9.258.406,65** | **1.280.887,06** | **96,13** |
| | *22% DDV- povračljiv (zasebni partner)* | 0,00 | 2.318.644,62 | 2.318.644,62 | | | |
| | *SKUPAJ Z DDV* | 0,00 | 12.857.938,33 | 12.857.938,33 | | | |
| | **SKUPAJ BREZ DDV (A+B+C)** | **66.000,00** | **10.898.133,69** | **10.964.133,69** | **9.501.193,35** | **1.462.940,34** | **100,00** |
| | *22% DDV* | 0,00 | 2.390.109,42 | 2.390.109,42 | | | |
| | *SKUPAJ Z DDV* | 66.000,00 | 13.288.243,11 | 13.354.243,11 | | | |
| | *SKUPAJ Z DDV (brez upoštevanja povračljivega DDV)* | 66.000,00 | 10.969.598,49 | 11.035.598,49 | | | |

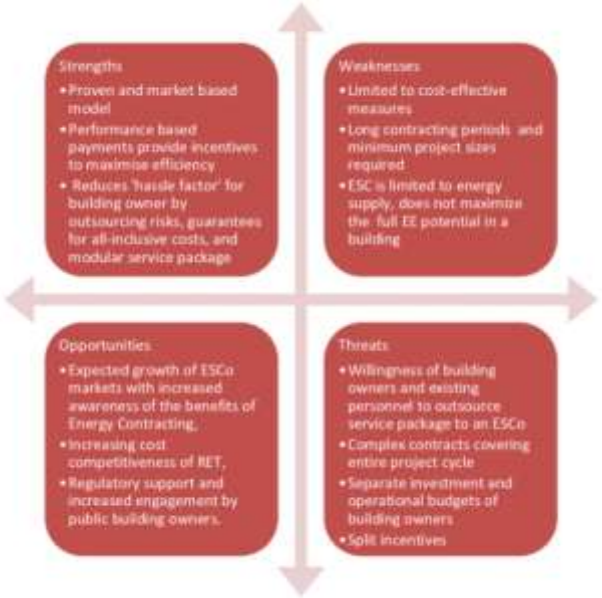
Povzetek virov za stavbe Skupine A in B:

| | | | |
|---|---|---|---|
| Nepovratna sredstva | 22.400,00 | 3.778.077,34 | 3.800.477,34 |
| Lastna sredstva javnega subjekta | 43.600,00 | 1.911.335,00 | 1.954.935,00 |
| Zasebni partner - JZP | 0,00 | 5.280.186,15 | 5.280.186,15 |
| Skupaj | 66.000,00 | 10.969.598,49 | 11.035.598,49 |

# INVESTMENT CONCEPT - 2

**LESSON 4 – Take time to list all benefits**

- One of the scenarios also PPP – EPC
- SWOT analysis prepared for specific project, circumstances, region, … do not just take some examples from the web
- Many benefits but also some negative aspects
- Discuss with stakeholders




https://www.researchgate.net/figure/Energy-Contracting-models-summary-of-SWOT-analysis_fig5_267203248

**RESULT in MARIBOR – EPC IS THE BEST OPTION FOR PROPOSED PROJECT**

# PROCEDURE – legally binding in many countries

## STEP 1

- Ask the market
- Get the ESCO proposals including proposed measures and cost benefit analysis
- Check and analyse the proposals and compare with investment concepts
- Identify ESCO and municipal conditions as a base for potential negotiations

## STEP 2

- Public call – ussualy in 2 phases
- 1st phase – identification of basic conditions that ESCO is legally, administrative and operationally able to perform EPC
- Make a short list of ESCO

## STEP 3

- Shortlisted ESCO invited to give the offer
- Negotiation phase – negotiate measures and financially and legal conditions
- Could take more months
- Set final conditions for ESCO and ask all of them for final offer
- Take the best one according to your criteria
- Make agreement

# PPP-EPC AND COHESION FUND
# CITY OF MARIBOR

**1 BIG MUNICIPALITY -**
**MANY OLD AND UNEFFICIENT BUILDINGS**
**24 SELECTED FOR EPC**
**SCHOOLS, KINDERGARTENS, SPORT HALLS**

**ENERGY AUDITS – POTENTIAL SAVINGS:**

- **4 GWh/a of energy**
- **1.200 t $CO_2$/a**
- **450.000 EUR/a**

**11-12 mio EUR INVESTMENTS**

# PPP-EPC AND COHESION FUND

**11-12 mio EUR INVESTMENTS 15 years agreement work done in 2019**

**5 mio EUR ESCO**

**3,6 mio EUR COHESION FUND**

**2 – 3 mio EUR OWN**

PROSPECT+



OŠ Kamnica.png - Pregledovalnik fotografij za Picaso


OŠ kamnica obnovljena.png - Pregledovalnik fotografij za Picaso
(992 x 243)
1:1

# MONITORING OF THE RESULTS

- Follow and monitor the implementation – it takes time but is far paid off (legally binding and more)
- Talk to users during the implementation
- Monitor the energy use, cost and emissions all the time
- At least on yearly basis talk to users,  municipal staff, others – ask for fillings, opinions for improvement

**LESSON 4 - Building a knowledge and trust for new projects**

# SUCCESSFUL PROJECT IS A MOTIVATION TO GO FURTHER – FOR ALL STAKEHOLDERS


**Renovation of 24 public buildings:**

- 12 mio EUR investment – PPP
- Reductions per year:
  - energy consumption by 5.952 MWh
  - energy costs by 446.000 EUR
  - maintenance costs by 28.500 EUR
  - $CO_2$ emissions by 1.305 tonnes
- More budget for other projects
- More knowledge and own experiences


https://www.cleanpng.com/png-clip-art-image-cartoon-vector-graphics-illustratio-7055717/

# FOR THE END …

- Do not be afraid!
- Money is not the problem!
- Start with smaller projects as the pilots
- A lot of municipalities have difficulties and have no experiences!
- Energy transition is the opportunity!

**LESSON 5 –**
**DO NOT GIVE UP!**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- Waves: Energy and climate friendly and unfriendly Mayors, Councillors
- New directors, headmasters, staff
- Financially good or worse year
- Talk to people, make education activities
- It takes time to spread the information about benefits, usually it goes „from mouth to mouth“
- Take it as life-long activity

PROSPECT +

Capacity building for cities and regions - from learning to action!

# Thank you!


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The PROSPECTplus project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 101023271

# Town of Križevci energy transition

# General info

Koprivnica-Križevci County, area of 263,7 km² and 59 villages

19.052 inhabitans, half of them in the urban area

great geotraffic location

favorable climate, fertile soil

SME, mostly retail, metal industry, construction, woodworking industry,
cca 1.400 small family farmers and business

# SECAP overview

38.000 t $CO_2$

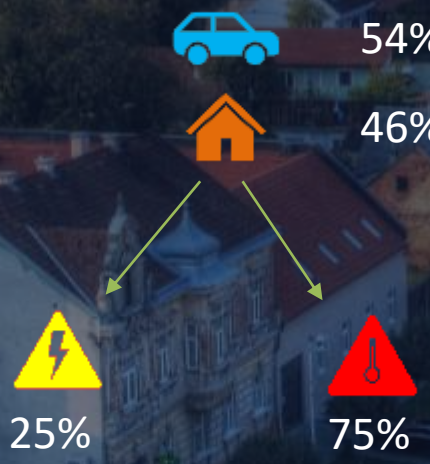


photo by Miroslav Strucic

# Overview of city projects

- Energy renovation of public buildings
- Using biomass as a source of thermal energy in Utility company
- Charging stations for electric vehicles
- Electric and hybrid city vehicles
- Public bicycles
- LED public lighting
- Energy advisors for energy-poor households
- Križevci sunny roofs
- Co-financing of solar power plants on family houses
- Study and strategy for the development of the green infrastructure of the City of Križevci until 2027
- Cadastre of greenery and urban equipment of the city of Križevci
- Investigation of geothermal potential for heating
- 5 MW solar power plant in cooperation with HEP

# Križevci sunny roofs

# Short description

- Implemented in 2018
- Municipality as enabler (owner of the buildings and institutions in it)
- ZEZ cooperative – project development and lead
- crowdfunding campaign to get microloans

**Stakeholders involved:**
Greenpeace, Development Center and Technological Park in Križevci, Public Library, Regional Energy Agency North, Energy cities, Rescoop.eu, and other public institutions in Križevci, citizens, media

# Križevački sunčani krovovi

## Do prvih solara zajedno!

Glavni nositelj projekta i idejni začetnik projekta Križevački sunčani krovovi je Zelena energetska zadruga (ZEZ).

Ali u tome nismo sami! Podršku nam daje **REA Sjever** u tehno-ekonomskim studijama, te uz podršku **Greenpeace-a** i **Grada Križevaca** u provođenju kampanje, te brojne međunarodne organizacije, kao što su Europska federacija energetskih zadruga (REScoop.eu) i europsko udruženje Energy Cities.

Ovim projektom omogućavamo da svatko od vas može postati ulagač u solarnu elektranu!

Kada kaže "energija u rukama građana", ZEZ misli ozbiljno.

prikupljeno **100%** sredstava

0% 100%

**Ova kampanja je uspješno financirana!**

Promo video:

# How it works?


## The role of the City?

- gives permission to set up power plant on the roof of the building in their ownership
- gives public support for the project and is actively involved in promoting
- takes over payment of the rent in case the user is not able

# **Development** Center and Technological Park

10 days campaign, 53 investors
Min 135 EUR- max 1.350 EUR
Average investment 530 EUR
cca 30.000 eur

- 4,5% interest
- 10 years Contract duration
- 38,8 t annual
- 30.000 EUR investment
  405 EUR monthly rent

# City Library Franjo Marković” Križevci

2 days campaign, 40 investors
Min 135 EUR- max 1.350 EUR
Average investment 400 EUR
23.000 eur

3% interest

10 years Contract duration

31,5 t annual

23.165 EUR investment

296 EUR monthly rent

# Why was this a success?

- A key success factor was the **community engagement** component
- Great promotion for the municipality as enabler that helped innovation to happen and engaged public institutions and citizens in a joint process of urban, green and sustainable transformation
- Opened the door to participation in several new projects and developing new partnerships
- Citizens established in 2020 a local energy cooperative
- Increased demand for solar equipment, resulting in new local business and new jobs creation


# Križevački laboratorij inovacija za klimu

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ENERGETSKA ZADRUGA KRIŽEVCI

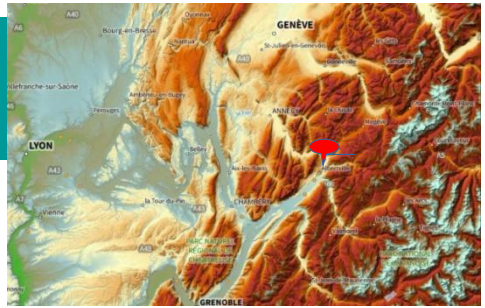

# Intracting for energy savings

## Own revolving funds

Sandrine de Ternay – finance director

*February 28th 2024*

# Albertville city


ALBERTVILLE

- Alpin environment
- 20,000 inh.
- 90 municipal buildings (13 schools, 1 central kitchen, several gymnasiums)
- 5,900 m² heated
- 3,950 public lighting points
- district heating network since 2019 (90 % local wood)

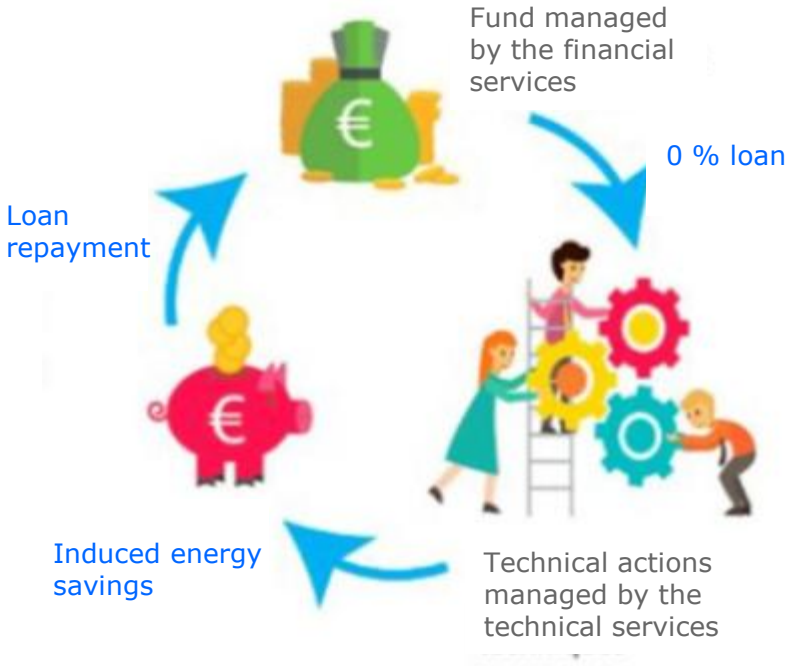
## City budget :

- EUR 5,830,000 general expenses
- Including NRJ = EUR 1,328,000 = 23 %
- EUR 6,500,000 equipment budget capacity / year
- Debt reduction target

# Intracting scheme – Why ? How ?

- Already several actions but nothing effective to drastically reduce our important energy consumption :
  - A lack of financial means to heavily invest in the renovation of the whole building stock
  - The limit of our debt capacity

- Choice of the intracting solution in 2019 :
  - To act quickly, by our own means
  - To reduce immediately
  - To initiate a virtuous circle  NRJ bills



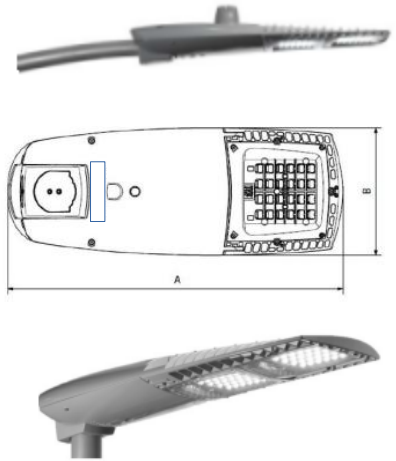
# Intracting scheme – step by step


- 1 : evaluation of our previous savings to get a legitimate basis for our fund
  - **volumes saved in 2018 X energy prices** in 2018
  - **Creation of a fund = EUR 113,610 in our investment budget**
  - **= 8 % of our energy operating budget**

- 2 : study and choice of the 1st savings measures
  - **Use the fund as quickly as possible** to be able to :
    - efficiency of the energy savings it allows / *ecological impact*
    - benefit immediatly from the savings to reduce our current expenses / *financial impact*
    - free ressources for further investments / *multiplier effect*

# Intracting scheme – step by step

- **2019-002 replacing of 87 street light bulbs by leds in 2 streets** (2 % public lighting park) :



Evaluation of energy saving :
= **- 73,195 Kwh / year of electricity**
= 76 % energy consumption saved
= - 73,195 Kwh x (0.101 EUR / KWh in 2019)
= **- 7,412 EUR / year**
= - EUR 74,120 during the 10 years of residual life

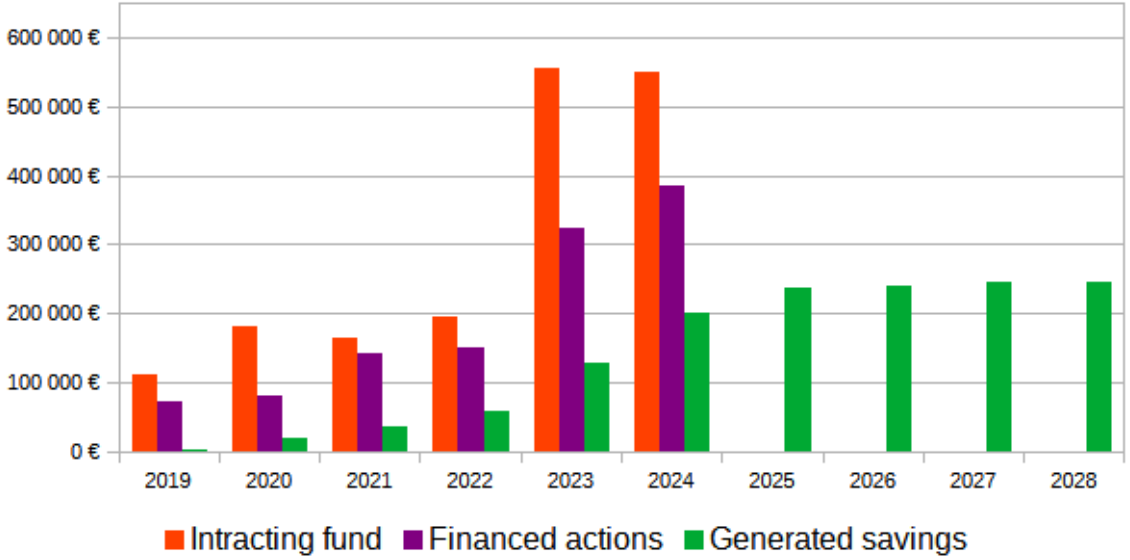
= **EUR 45,120 net benefit at the end of 10 years of use**

Coverage of the financing need by the intracting fund :
EUR 29,000 = 100 % need = cost
4 years = return on investment

→ We accelerated this equipment program through the intracting fund
Easy measure for the 1st year of implementation (existing program)

# Intracting scheme – Our 1st results

| | 2019 | 2020 | 2021 | 2022 | 2023 | MADE 2019-2023 | 2024 | 2025 | 2026 | PLANNED 2024-2026 |
|---|---|---|---|---|---|---|---|---|---|---|
| Intracting fund | 113 610 € | 224 261 € | 307 043 € | 358 061 € | 765 439 € | 1 215 227 € | 993 186 € | 1 197 155 € | 1 744 763 € | 1 691 529 € |
| Financed actions | 72 462 € | 82 275 € | 144 291 € | 150 759 € | 324 412 € | 774 200 € | 387 793 € | | | |
| Savings of energy | 3 892 € | 19 080 € | 36 877 € | 60 107 € | 130 696 € | 250 652 € | 200 965 € | 238 199 € | 242 236 € | 681 400 € |

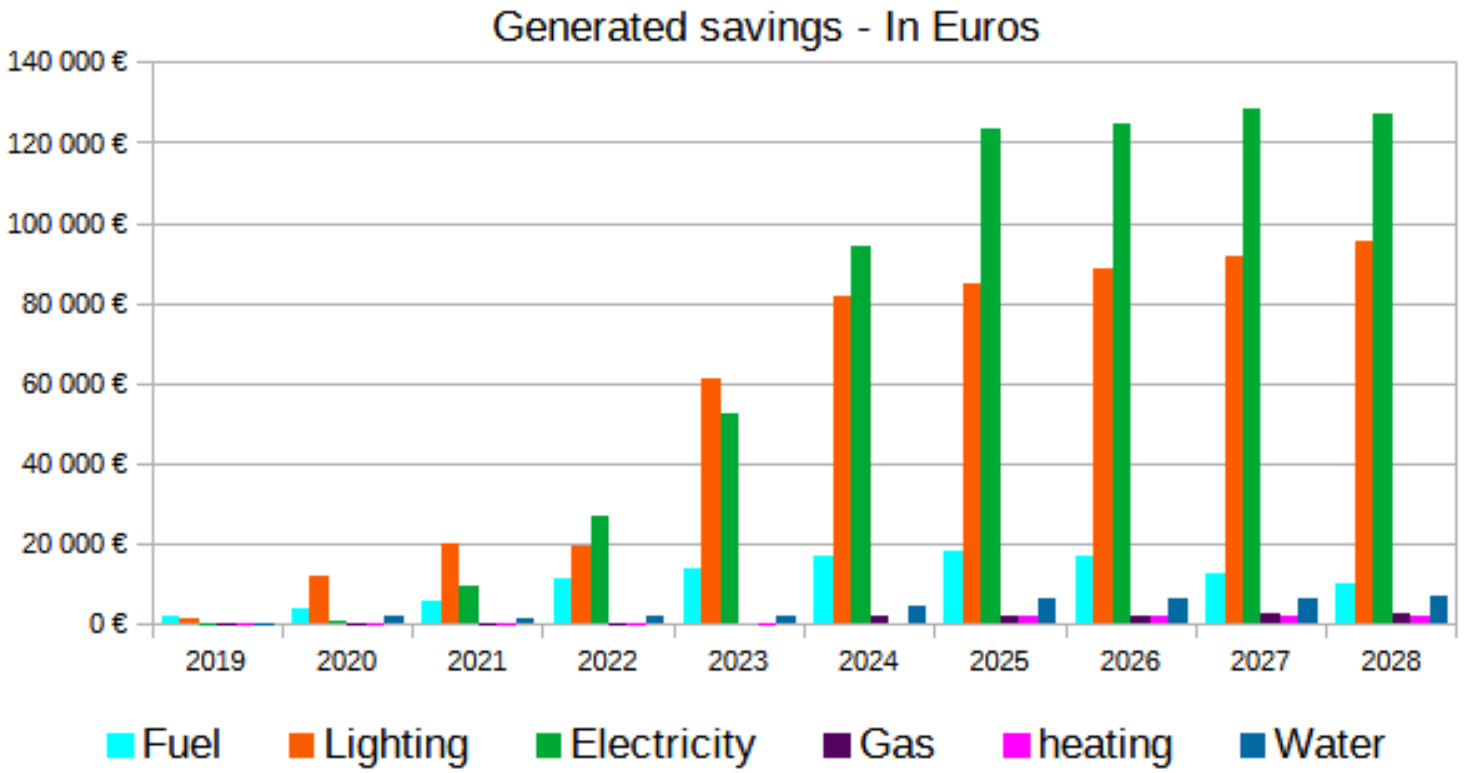



- NRJ budget :

1.307 M€ in 2019

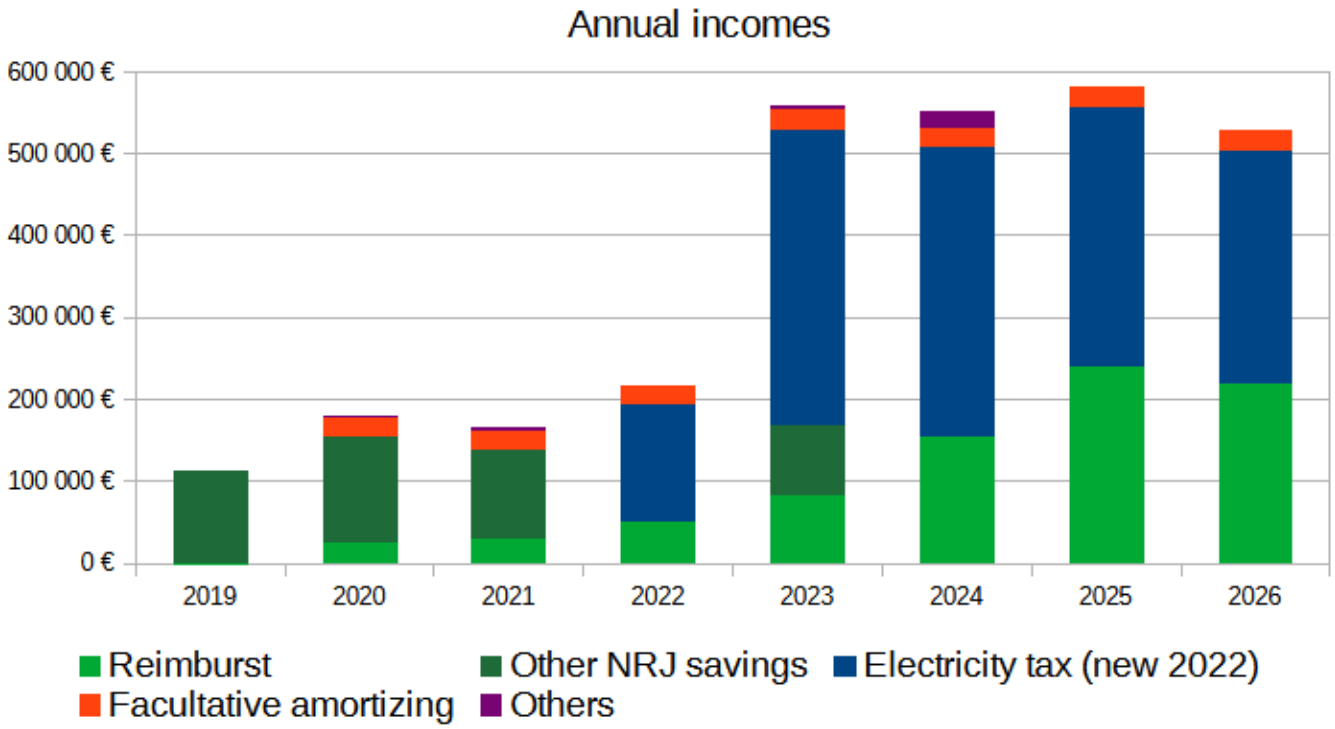
1.328 M€ in 2023

# Intracting scheme – Our 1st results

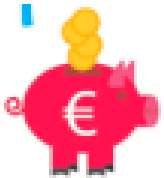
# Intracting scheme – Crucial initial « ignition »

- Financial solutions : a new national electricity tax en 2022, introduction of facultative amortizing
- Political option : ressources must be linked to energy in order to draw up a coherent approach to the sobriety policy



# Intracting scheme – Multi-dimensional tool

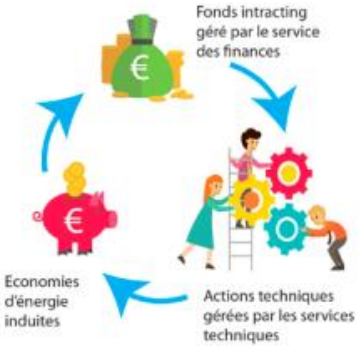
- Politicy and organization
  - Virtuous circle for sobriety and energy transition
  - Strengthens the partnership « technics - finance »
  - Services able to show autonomy and creativity – better recognition of their expertises – more legitimacy
  - Its results protect the fund’s longevity



- Finance
  - Multiplier effect of the financed actions
  - Increase our financial independence / savings
  - Boost the tool to get a bigger impact at the beginning
  - Powerfull return on investment !

# Intracting scheme – Multi-dimensional tool

- Energy efficiency and environmental protection
  - Act quickly and concretely to reduce NRJ consumption and pollution, even with small steps
  - Benefit in return from a financial savings for even more and greater actions




- Clear and concerted rules to be efficient
  - Simple internal tool if continuously concerted
  - No regulation – Wow effect on the organization !
  - Choice of a continuous improvement approach

# Intracting scheme – our other feed backs

## The importance of the origin of the fund

- The rationale for the intracting fund has been facilitated by :
  - proving the **importance of our energy expenditures and their always higher amounts**
  - using the fund for saving measures to **reduce our operating expenses,**
  - **in a continuous improvement process**
- The **biggest obstacles to overcome** were :
  - the need to finance other heavy investments, already planned, on our investment budget
  - our concern to limit our debt, which induces a difficulty to introduce new expenses
- Asset at the beginning = **limited amount** of the fund
- Next challenge = to **use the fund for larger operations without diverting it** from its purpose

# Intracting scheme – our other feed backs

## The importance of a flexible approach

- Whenever possible, we choose the most advantageous calculation formula to :
  - increase the fund's amount to get a bigger and faster impact on our consumption
  - finance as many measures as possible, even if it could be difficult to establish strictly the saving results / *some approximative and comparative approaches*
- We paid attention to the simplicity of the device, to be as convincing as possible :
  - close link between the ressources and the financed measures
  - simple calculation formula for energy savings evaluations