



- System Dominum - Increasing energy efficiency in buildings by greatly enhancing your home's value

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SYSTEM DOMINUM

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Slovenski projekt Dominum osvojil tretje mesto na evropskem tekmovanju primerov dobrih praks

Datum: 06. julij 2018 Avtor: **Andreja Šalamun** Kategorija: **Članki**

Tema: **OVE in URE**, **Energetska politika**, **Nove tehnologije**, **Ekonomija**

Slovenski projekt System Dominum, ki ga je kot primer dobre prakse v mednarodnem projektu BUILD2LC predlagala Lokalna energetska agencija Gorenjske (LEAG), je na tekmovanju primerov dobrih praks projektov Interreg Europe osvojil tretje mesto. Projekt ima velik potencial tudi zunaj Slovenije, saj so na primer zanj že pokazali zanimanje Španci, pravijo v LEAG. Do uresničitve ideje naj bi v Sloveniji prišlo približno v dveh letih, po najbolj optimističnem scenariju pa naj bi prve projekte začeli izvajati že prihodnje leto.

Gre za idejo Tomaža Krištofa iz družbe Studio Krištof arhitekti, ki predvideva, da bi hkrati z energetske prenovali starejših večstanovanjskih stavb poskrbeli tudi za njihovo potresno varnost in za večjo kakovost bivanja. Stavbe, ki so jih na primer v Sloveniji gradili v letih od 1945 do 1963, večinoma niso bile zgrajene protipotresno, pa tudi pri mnogih stavbah iz kasnejšega obdobja protipotresna gradnja ni bila zadovoljiva, ugotavljajo v družbi Dominum, ki so jo kot hčerinsko podjetje prav v namen tovrstne prenovali ustanovili v družbi Studio Krištof arhitekti. Ugotavljajo, da se ob množičnih energetskih prenovali večstanovanjskih stavb, ki se izvajajo v zadnjih letih, težave s protipotresno konstrukcijo starejših večstanovanjskih stavb še dodatno zakrivajo.

Druga težava, ki bi jo lahko rešili s sistemom Dominum, je prenaseljenost stanovanj. Medtem ko so enostanovanjske hiše dostikrat izredno velike za družinske potrebe, so stanovanja večinoma prenaseljena, kar pomeni, da v njih živi preveč ljudi na m² površine. Po prenaseljenosti stanovanj smo nad evropskim povprečjem, pravijo v družbi Dominum.

V projektu System Dominum bi tako hkrati z energetske prenovali večstanovanjskih stavb poskrbeli za prenovali konstrukcije večstanovanjske stavbe in s tem za večjo potresno varnost ter tudi za razširitev stanovanj. Ideja je, da bi vsaki stavbi dozidali prizidek, ki bi omogočil razširitev obstoječih stanovanj, ter ji dodali nadstropje ali dve, v katerem bi zrasla nova stanovanja. Z njihovo prodajo bi lahko financirali večino prenovali, kar pomeni, da bi se tudi strošek države, ki ga ima z energetskimi sanacijami stavb, občutno znižal.



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SYSTEM DOMINUM APPROACH

- Buildings are responsible of 40% of EU final energy consumption.
- Energy escapes mainly through walls and windows. So, let's renovate the façades, right?
- But this is expensive and uncomfortable for tenants so, why not building a NEW building envelope?

→ Instead of renovating the walls... **build new ones!**



1. Before renovation

1. Before renovation:

- Small apartments
- No elevator
- No earthquake safety
- No thermal insulation

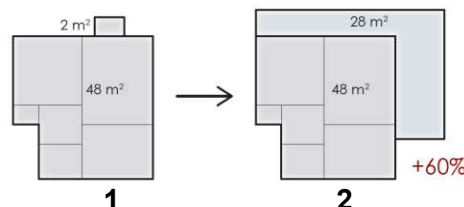


2. After renovation:

- ✓ **Larger**, more flexible (and higher value) **apartments**
- ✓ Earthquake safety enhanced
- ✓ Thermal insulation
- ✓ Elevators!



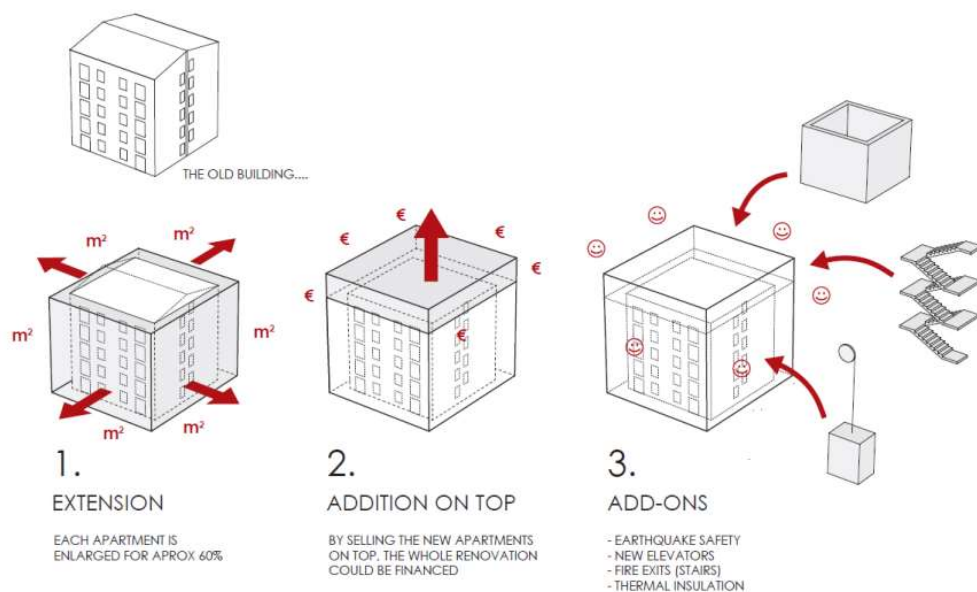
2. After renovation



2. After renovation

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- Furthermore, the reinforcement of the structure could let us add top additional floors.
- Incomes from selling new apartments might finance entirely the renovation works!

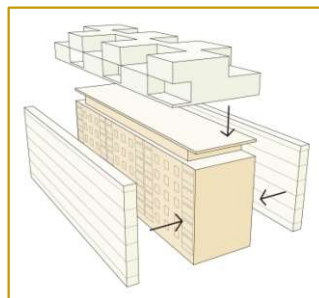
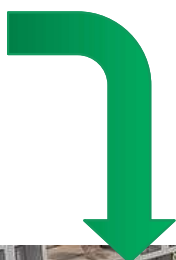


Challenges addressed (i):

1. Developing cross sector cooperation between relevant sectors: renewables, energy efficiency, engineering, architecture
2. Identifying and accessing innovative funding methodologies, including both public and private investment
3. Improving SME competitiveness in the energy efficiency field

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- Floor area extensions are possible as well for a limited number of façades

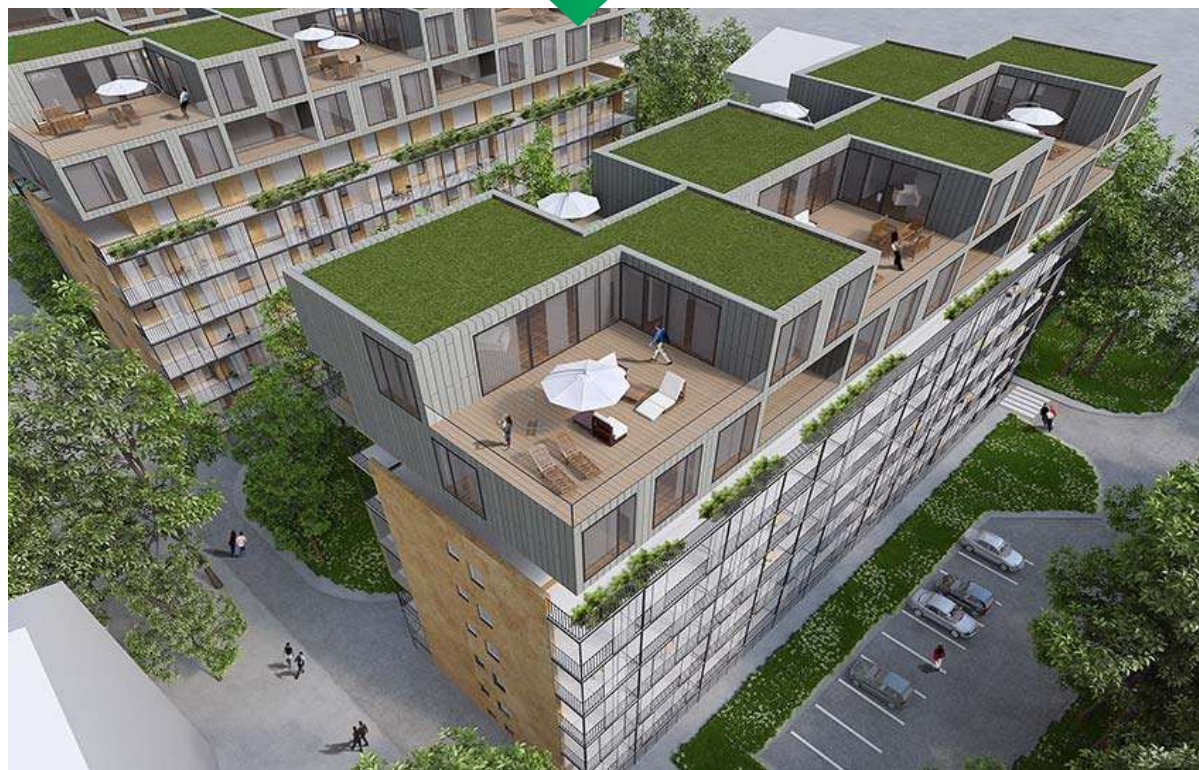


Addition on top:

adding the new apartments

Extension:

increasing the floor area of the existing apartments



Challenges addressed (ii):

4. Improving SME competitiveness in the energy efficiency field.
5. Improving consumer behaviour.
6. Improving energy efficiency in private and public buildings.

And...

→ The owner's financial assistance, if needed might be backed up by a notoriously higher value of the property!

KEY PLAYERS ENGAGEMENT



Owners – young families



Owners – old and disabled people



Landlords

Tenants



Municipalities



National authorities

Apartment size increase

Elevators

Earthquake safety improved

Value of property increase (~100%)

Sustainable strategy for urban growth

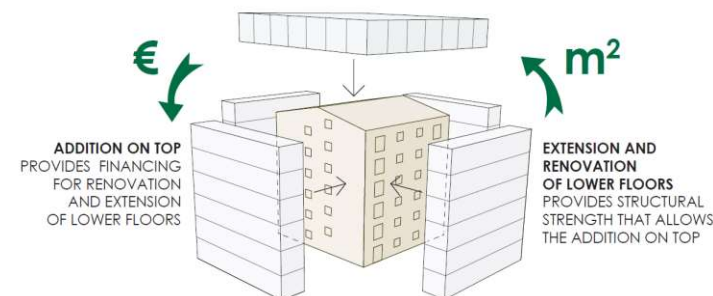
Energy efficiency:
↓ cost, ↑ confort

Greener, nicer urban look



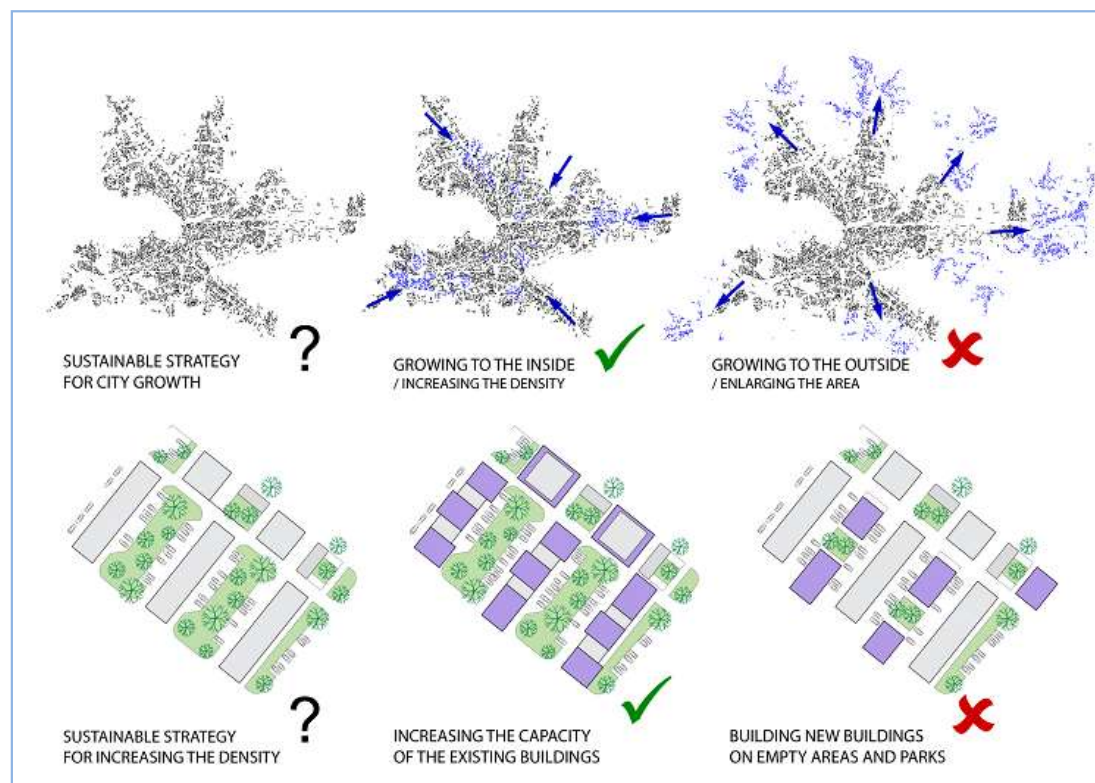
WHAT MAKES US DIFFERENT?

- When performing energy rehabilitation of dwellings, we usually think in renovating the envelope (façades and windows). This is expensive, so hard to finance, and very uncomfortable.
- Instead, *System Dominum* proposes to **build a NEW totally modern envelope plus, when possible, addition on top.**
- This concept is not only about energy rehabilitation in buildings, but a economically sustainable approach that might change to greener the look of the most humble neighbourhoods all over Europe!



From the point of view of **municipalities**:

- Applying *System Dominum* concept is also better than increasing city surface.
- Available area is scarce, **and green areas should be kept** as green as they already are.
- Also, it is specially addressed for **cheap dwellings and social housings**, precisely the buildings that are harder to renovate!

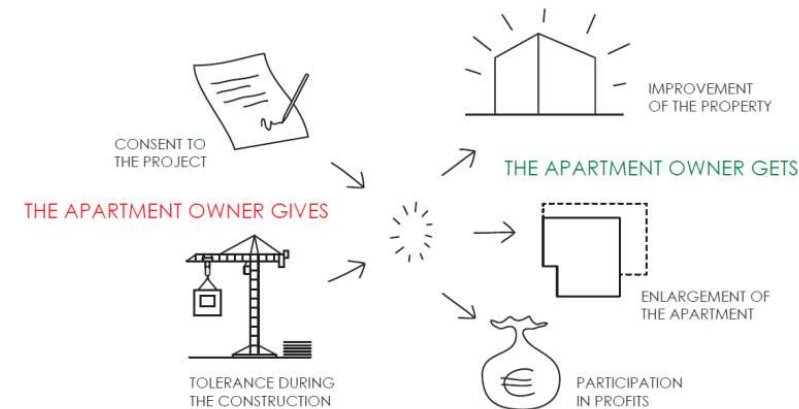


SUSTAINABILITY OF THE APPROACH

Why the EU should support System Dominum?

The *System Dominum* renovations could finance themselves, **without any subsidies**. The owners do not get only thermal insulation, but also:

- Bigger size apartments and better quality dwellings and buildings
- Earthquake safety enhanced
- Elevators!
- The new floors might cover completely the renovation costs



This is a clear sustainable investment opportunity. So, **why do we need your support?** → To open minds!

- ❑ Promote **modification in building rules** to enable easier renovations → occupation of public space in some cases.
- ❑ **Change of spatial act** (urban planning) to add on-top new apartments when possible.
- ❑ To avoid the **need for 100% consent** of the owners for renovations that improve earthquake safety of the buildings. What about 51%?
- ❑ **Pilot projects** are needed to show that this is doable. Let's start with pioneering municipalities (as Ljubljana), that has a plan to set its own local fund for such renovations... and the rest will come.
- ❑ The financial support, if needed, is backed up by a notoriously higher value of the property, help us explain this to the European **banking system**.
- ❑ And what about the "bank of Europe", the **EIB**?
- ❑ Also, a **database of candidate buildings** would be great, we suspect there are million of them!





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Thank you!



European Union
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