

TAKING
COOPERATION
FORWARD



Benczúr-ház, Pestszentimrei Községi Ház



Introducing the TOGETHER CE Project



Municipality of Hegyvidék

OVERVIEW OF THE PRESENTATION

Project
overview

Cluster of
buildings

Running and
planned
actions

Dissemination



PROJECT PARTNERSHIP

1. Province of Treviso IT - LP
2. Energy Agency Vysočiny CZ - PP2
3. University of Maribor SI - PP3
4. City of Zagreb HR - PP4
5. Association of Municipalities Polish Network "Energie Cités" PL - PP5
6. Municipality of Paks - PP9
7. **Municipality of 12th District of Budapest HU - PP7**
8. Slovak Innovation and Energy Agency - PP8



NATIONAL LEVEL

*Slovenian Ministry of Infrastructure
& Energy Directorate*

*Polish National Fund For Environmental
Protection and Water Management*

*Ministry of Economy of the Slovak
Republic*

Association of Italian Municipalities

*Hungarian National Association of
Local Authorities*

*Hungarian Association of Climate-
Friendly Settlements*

REGIONAL LEVEL

Veneto Region- Energy Department

Vysočiny Region

LOCAL LEVEL

21 Municipalities



TOGETHER aims at

- to encourage CE Public Administrations to adopt managerial EE solutions
 - involving users in the energy management process
 - to improve energy efficiency of their buildings
 - benefit in terms of payback and public money savings
- to innovate their management system by integrating different tools:
 - space/time organisation of the buildings
 - Demand Side Management (DSM)



<https://www.youtube.com/watch?v=n8n1jzb4nSk&feature=youtu.be>



CLUSTERS OF BUILDINGS



9 buildings, of which:

- 3 office buildings, incl. municipal office building
- 3 kindergardens
- 1 drawing school
- 1 sport center (swimming pool)
- 1 cultural center



BUILDING SPECIFIC APPROACH

- Complex approach
- **Personalised approach for each building**
- Negotiation panel meeting
- Discussion with decision makers on Building Alliance (mayor, vice mayor)
- Consultation with key building facility managers



DISCUSSION WITH DECISION MAKERS

Discussion with decision makers
on Building Alliance (mayor, vice
mayor)



PRELIMINARY STEPS

- Energy audits
- Installation of smart meters
- Development of data display
- Identification of target groups
- Development of training materials and tools
- Study of best practices, study visits (Zagreb, Treviso - current event)



SMART METERS AND DASHBOARD



Vízfogyasztás mérés figyelmeztető jelzéssel

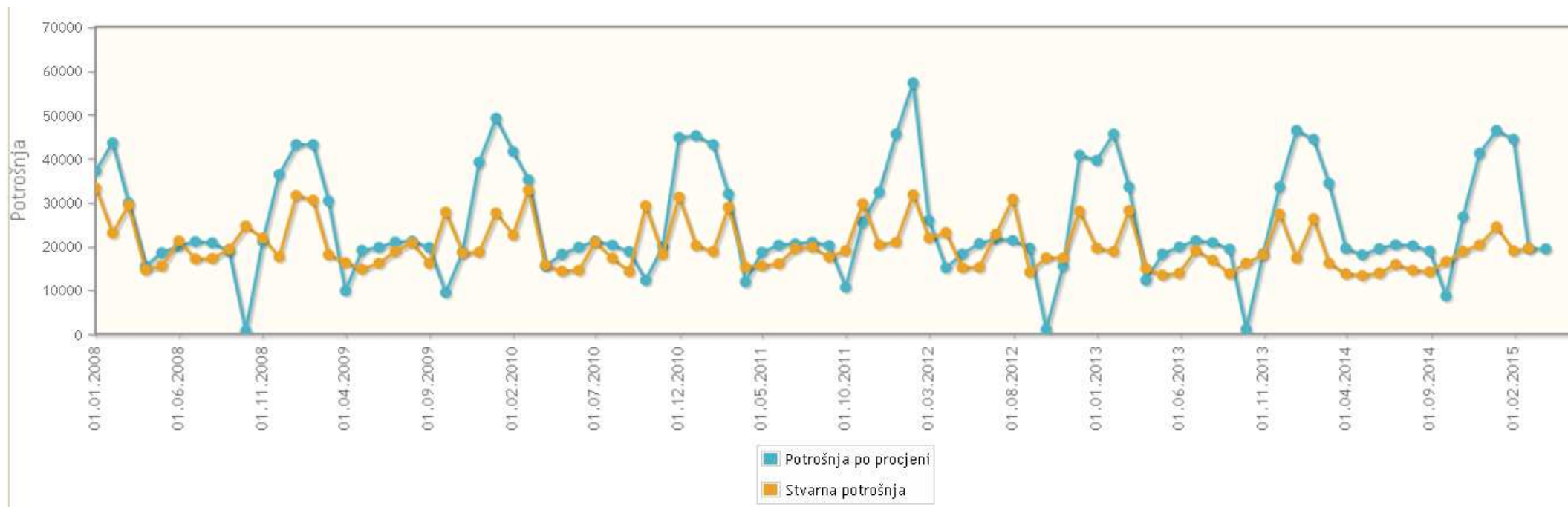
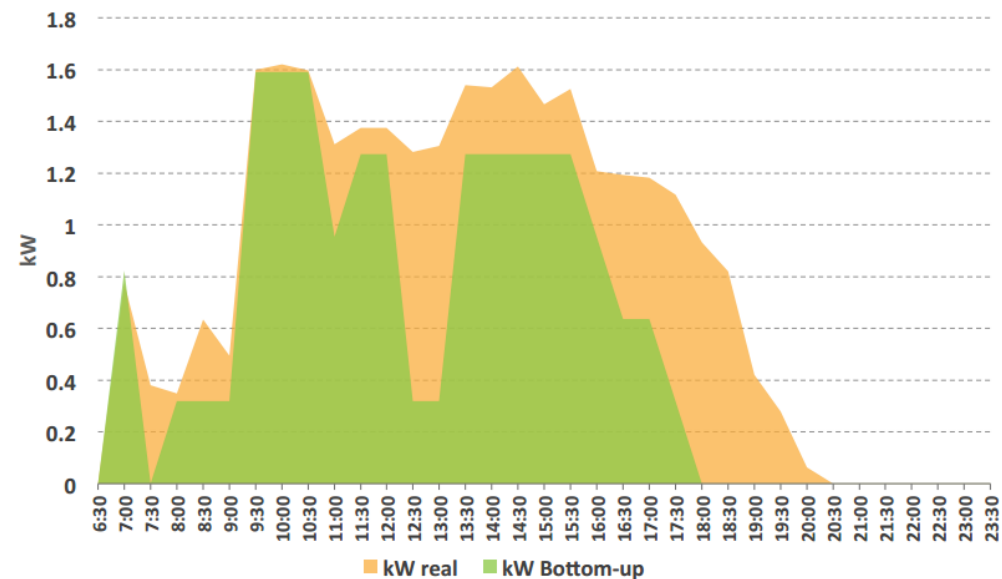
Osvježi Godina: 2015 Mjesec: 10 Voda [m³] ☒

MTR: (456260) \$ Godina: 2015 Mjesec: 10 Brojači: 1 Voda [m³]

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0	0.3	0.3	0.3	0.3	0.5	0.3	0.7	0.4	0.3	0.7	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.7
1	0.3	0.4	0.3	0.4	0.3	0.4	0.9	0.3	0.4	0.8	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.15	0.4	0.3	0.3	0.3	0.4	0.6
2	0.4	0.3	0.4	0.4	0.3	0.3	0.8	0.3	0.3	0.7	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.15	0.3	0.3	0.4	0.4	0.4	0.7
3	0.4	0.3	0.3	0.4	0.4	0.4	0.8	0.4	0.4	0.7	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.7
4	0.3	0.4	0.3	0.3	0.3	0.3	0.9	0.3	0.3	0.7	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.6
5	0.3	0.3	0.4	0.4	0.3	0.3	0.8	0.4	0.4	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.7
6	0.4	0.4	0.4	0.3	0.4	1.4	0.8	0.3	0.4	0.8	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.6
7	0.4	0.4	0.4	0.4	0.5	0.5	1.1	0.4	0.5	0.9	0.4	0.5	0.5	0.6	0.5	0.6	0.4	0.4	0.5	0.4	0.6	0.6	0.4	0.4	0.4	0.5	0.6	0.5	0.7	0.4	0.7
8	1.2	1.3	0.5	0.3	1.33	1.33	1.42	0.4	1.14	1.0	0.4	1.21	1.12	1.11	1.12	1.13	0.6	0.3	1.21	1.24	1.33	1.23	1.32	0.5	0.3	1.43	1.14	1.24	1.14	1.23	0.7
9	1.4	1.4	0.5	0.4	1.17	1.41	1.38	0.3	1.52	1.0	0.4	1.41	1.31	1.4	1.32	1.41	0.4	0.3	1.25	1.42	1.23	1.4	1.47	0.5	0.4	1.18	1.35	1.4	1.42	1.45	0.6
10	0.9	0.9	0.4	0.3	1.42	1.24	1.35	0.4	1.36	0.5	0.3	1.21	1.34	1.27	1.4	1.4	0.5	0.4	1.22	1.11	1.2	1.16	1.32	0.5	0.3	1.25	1.27	1.02	1.19	1.35	0.6
11	1.1	1.2	0.6	0.4	1.09	1.26	1.25	0.4	1.48	0.6	0.4	1.33	1.41	1.18	1.15	1.32	0.5	0.3	1.13	1.2	1.19	1.2	1.26	0.4	0.4	1.13	1.16	1.41	1.26	1.15	0.7
12	0.9	0.0	0.6	0.3	1.08	1.15	1.21	0.7	1.32	0.5	0.4	1.18	1.06	1.27	1.12	1.24	0.5	0.3	1.05	1.12	1.11	1.12	1.35	0.8	0.3	1.1	1.2	1.13	1.09	1.18	0.7
13	1.0	1.1	0.5	0.4	1.26	1.33	1.03	0.8	1.4	0.6	0.4	1.43	1.26	1.33	1.32	1.42	0.5	0.4	1.26	1.32	1.32	1.19	1.47	0.4	0.3	1.41	1.24	1.32	1.36	1.41	0.6
14	1.2	1.44	0.6	0.4	1.31	1.34	1.41	0.7	1.4	0.4	0.4	1.31	1.39	1.35	1.41	1.38	0.4	0.4	1.26	1.17	1.49	1.32	1.3	0.4	0.4	1.25	1.32	1.4	1.17	1.39	0.7
15	1.2	1.22	0.7	0.4	1.4	1.26	1.25	0.7	1.53	0.4	0.4	1.5	1.4	1.32	1.33	1.38	0.4	0.3	1.2	0.98	1.16	1.32	1.55	0.4	0.4	1.25	1.33	1.31	1.25	1.55	0.7
16	0.9	1.36	0.6	0.3	1.18	1.21	1.18	0.8	1.25	0.3	0.4	1.16	1.11	1.13	1.19	1.03	0.3	0.3	1.12	1.01	0.91	1.22	1.27	0.4	0.3	1.13	1.19	1.28	1.18	1.26	0.6
17	1.4	1.29	0.5	0.4	1.33	1.44	1.41	0.8	1.49	0.4	0.4	1.35	1.41	1.36	1.42	1.4	0.4	0.4	1.33	1.23	1.36	1.34	1.39	0.3	0.3	1.33	1.36	1.48	1.41	1.48	0.7
18	0.7	0.7	0.6	0.4	0.8	1.21	0.9	0.5	1.01	0.4	0.4	1.3	1.01	1.0	1.0	0.8	0.4	0.4	0.8	0.91	0.8	0.9	1.0	0.4	0.4	0.8	0.7	0.9	0.8	0.4	0.6
19	0.7	0.6	0.4	0.4	0.5	0.9	0.5	0.4	0.8	0.3	0.3	0.6	0.6	0.9	0.6	0.5	0.3	0.4	0.7	0.5	0.7	0.5	0.6	0.4	0.4	0.5	0.6	0.7	0.5	0.1	0.7
20	0.5	0.6	0.5	0.4	0.7	0.9	0.6	0.3	0.9	0.4	0.4	0.7	0.6	0.8	0.7	0.7	0.4	0.3	0.7	1.0	0.8	0.6	0.5	0.3	0.4	0.7	0.7	0.7	0.6	0.2	0.7
21	0.6	0.5	0.4	0.3	0.8	1.0	0.4	0.4	0.8	0.4	0.3	0.6	0.6	0.5	0.5	0.4	0.3	0.3	1.06	1.0	0.6	0.6	0.5	0.3	0.3	0.6	1.1	0.61	0.6	0.1	0.6
22	0.4	0.5	0.3	0.5	0.9	0.9	0.5	0.4	0.8	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.61	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.8	0.5	0.5	0.53	0.6
23	0.4	0.4	0.4	0.3	0.8	0.7	0.4	0.3	0.7	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.8	0.7



ANALYTICAL DSM



TARGET AND SUB-TARGET GROUPS

- Schools and kindergardens
 - Managers
 - Students
 - Teachers
 - Janitors
 - External users (if present)
 - External service provider (if present)
 - (indirectly) parents
- Offices
 - Managers
 - Employees
 - External service provider (if present)
- Buildings visited by the public
 - Managers
 - Visitors
 - Staff
 - Technicians
 - External service provider



- Members: representative of pilot buildings
 - Building owners (Municipality) and renters
 - Political representatives, such as council members
 - Building managers (school and kindergarden headmasters or their assistant)
 - Energy managers
- Meetings each cca. 3 months during pilot





Introduction to the smart metering system
Analytical DSM: common analysis of measured data

Local training (7+2 training modules) developed on the basis of stakeholders' expectations and needs





Step 1: Motivation workshop -
Introduction to ENERGY COMMANDO
COMPETITION

Step 2: Setting-up the team

Step 3: Common analysis of
monitored data, highlighting
problems

Step 4: Commando in action

- Investigation period
- Interviews (questionnaire provided)

Step 5: Discussion of experienced
results

Step 6: Actions to save energy



COMPETITION

- Category 1: The biggest energy saver
- Category 2: The greenest kindergarden
- Category 3: The best energy commando

- Start: March 2018
- End: June 2018
- Prize: Under discussion (Trip to Zagreb / Cracow)



OTHER ACTIONS

- Leaflets, newsletters:
 - Introduce project
 - Explain display
 - Energy saving tips
- Display of monitored data
- Energy saving tips
- Posters, pictograms designed by the drawing school



OTHER ACTIONS

- Communication to externals:
 - Hegyvidék journal
 - Hegyvidék TV
 - Social media
- Info day:
 - 30 January 2018
 - Target group: residents
 - Energy toto
 - Presentation of the project, building guided tour



ENERGY GLOBE HUNGARY AWARD

E.ON ENERGY GLOBE
Magyarország 

[Kezdőlap](#)

[A versenyről](#)

[Nevezés](#)

[Elbírálás menete](#)

[Kapcsolat](#)



A nevezési időszak lezárult

Közönségsvavazás:
2018 februárjában



- Category: Municipalities
- TOGETHER Hegyvidék team is selected by the professional jury into the Final
- Final decision will be based on public votes
- High publicity: project in focus

TAKING COOPERATION FORWARD

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ANY PRESS IS GOOD PRESS!

07/06, Regional Studies Association Annual Conference in Dublin, Ireland "The Great Regional Awakening: New Directions". Within the Plenary session 4: "**Energy - Security, efficiency, Green & Renewable**",

21.22/06 at the **EUSEW in Bruxelles** together with the CENTRAL EUROPE Programme

22/09- Interreg CENTRAL EUROPE Annual Event in Berlin presenting the project at the PITCH-IT session

21/09- **MED project GRASPPINO** Local event in Siena (Tuscany)

02/09 - **European Network of Living Lab** introducing the project in the workshop devoted to tackle the issue "Leveraging Behavioral Change for Energy Efficiency in Public Buildings; at the Week of Region in Bruxelles (11.10)

10/11- **IOT and smart cities** in Torino

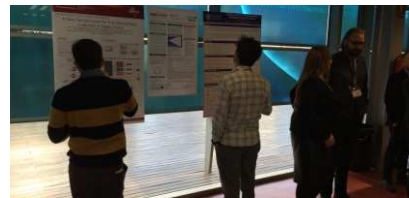
24/11 Conference "**8th Serious Games Development & Applications (SGDA 2017)** " in Valencia
EAV presented the **TOGETHER** at the Energy forum 2017 in Czech Republic on the and during the Week of Region in Bruxelles (11/10)

PNEC: Webinar organised in the framework of the **Covenant of Mayors** (08/06);

PAKS: on occasion of the Interreg europe project "SET-UP" meeting in Paks (05/07)



TOGETHER EVENTS AND INTERNAL RELATIONSHIP



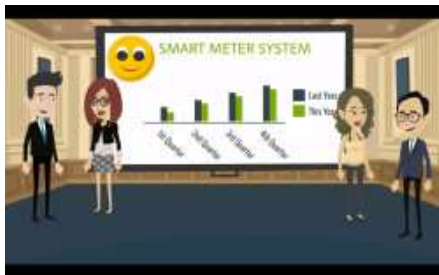
TOGETHER EVENTS AND INTERNAL RELATIONSHIP



PROJECT VIDEOS AND HUMPHREY



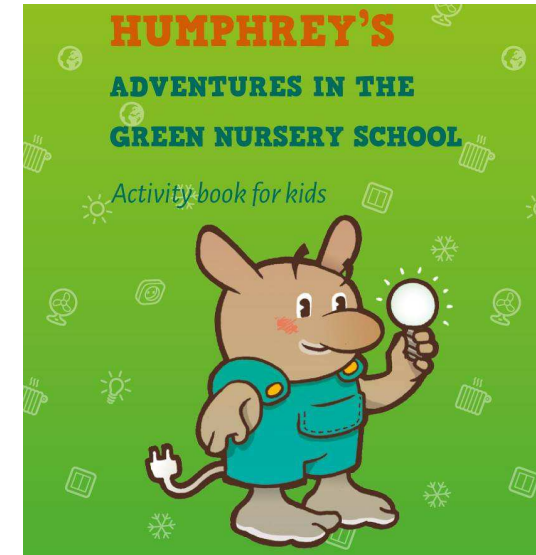
<https://www.youtube.com/watch?v=n8n1jzb4nSk&feature=youtu.be>



<https://www.youtube.com/watch?v=FLA6q11MEkY&feature=youtu.be>



<https://www.youtube.com/watch?v=XOaVmC4scVU&feature=youtu.be>



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