

BIOMASS FOR HEATING OF PUBLIC FACILITIES IN BANSKA BYSTRICA REGION

Pilot project

Juraj Zamkovsky

Friends of the Earth-CEPA

CEE Bankwatch Network

SF Team for Sustainable Future



Overall objective

To enhance economic self-sufficiency of rural municipalities through the local use of local biomass potential.



Specific objectives

- To decrease municipal expenses for heating and to use savings for regional development.
- To modernize public heating systems (boilers and heat distribution systems) in marginalized rural region.
- To reduce greenhouse emissions.
- To set a new trend in using EU Structural Funds for decentralized and sustainable energy production.
- To test opportunities for broader introduction of the idea in similar regions.

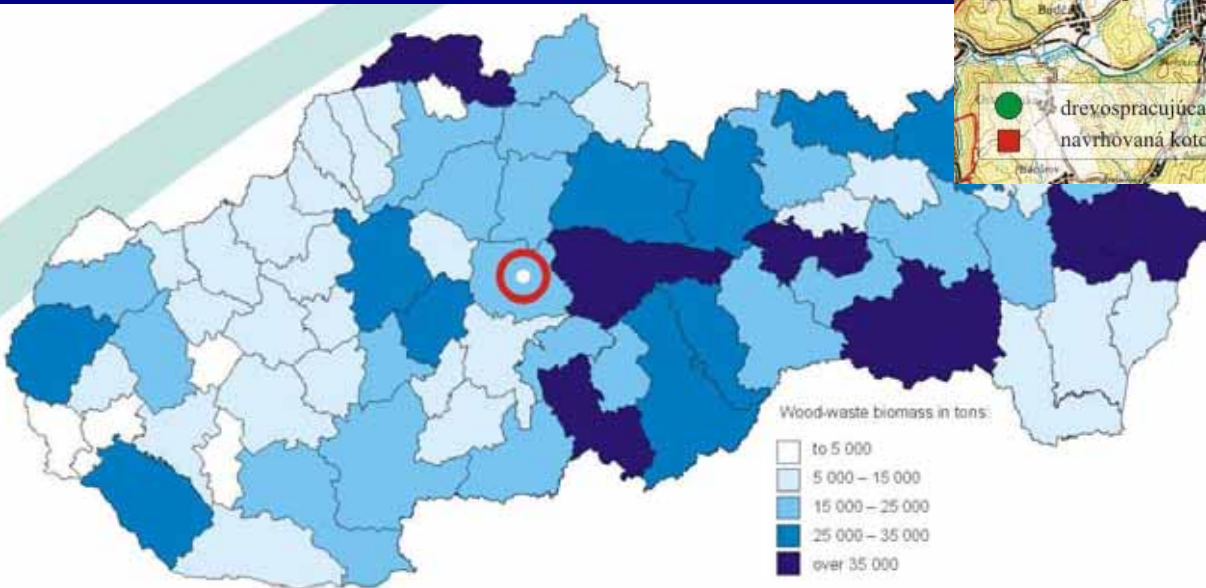
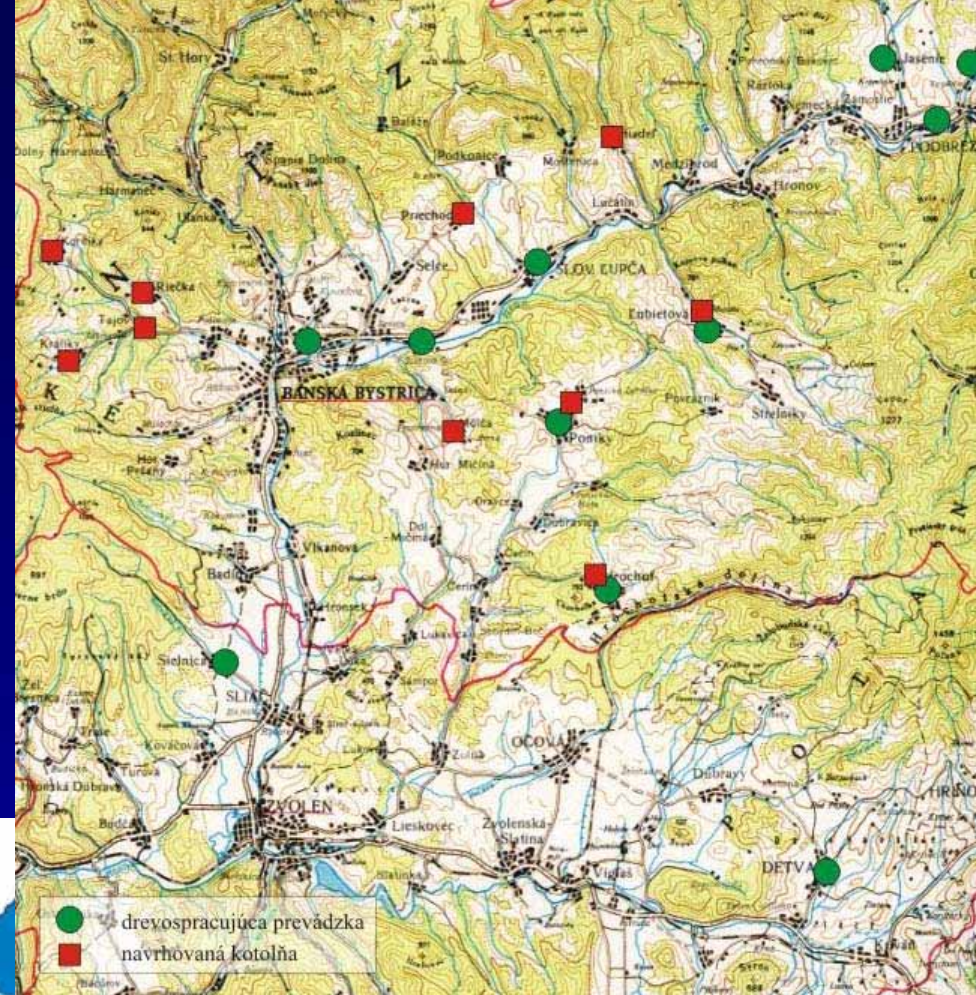


Printella
Zeme
CEPA

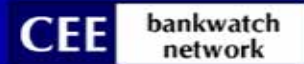
CEE

bankwatch
network

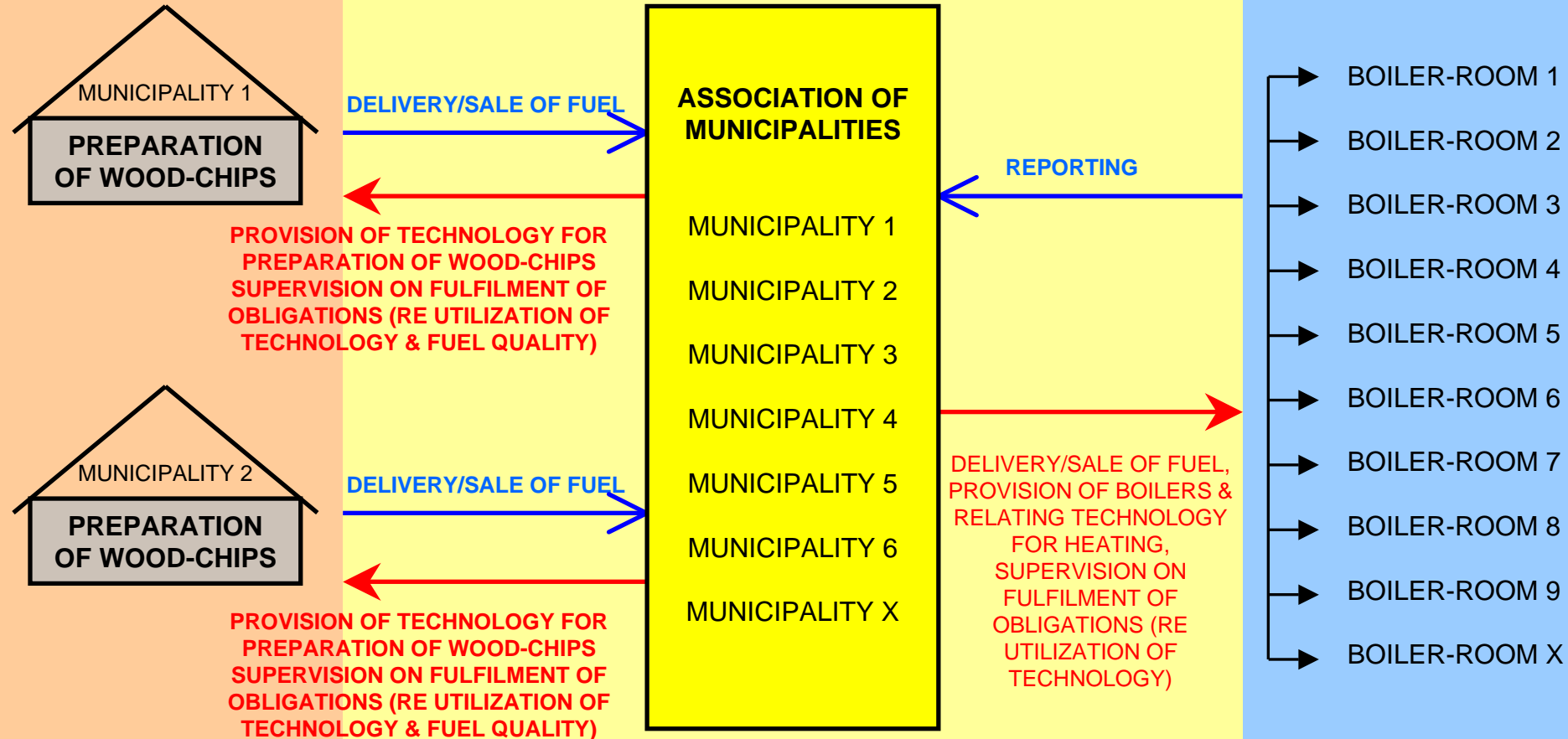
Project location



Annual production of usable wood-waste biomass in Slovakia, 2002 (Source: LVU Zvolen, 2002)



PROJECT ORGANIZATIONAL SCHEME



FUEL PREPARATION
(MUNICIPAL SAW-MILLS)

PROJECT MANAGEMENT
(ASSOCIATION OF MUNICIPALITIES)

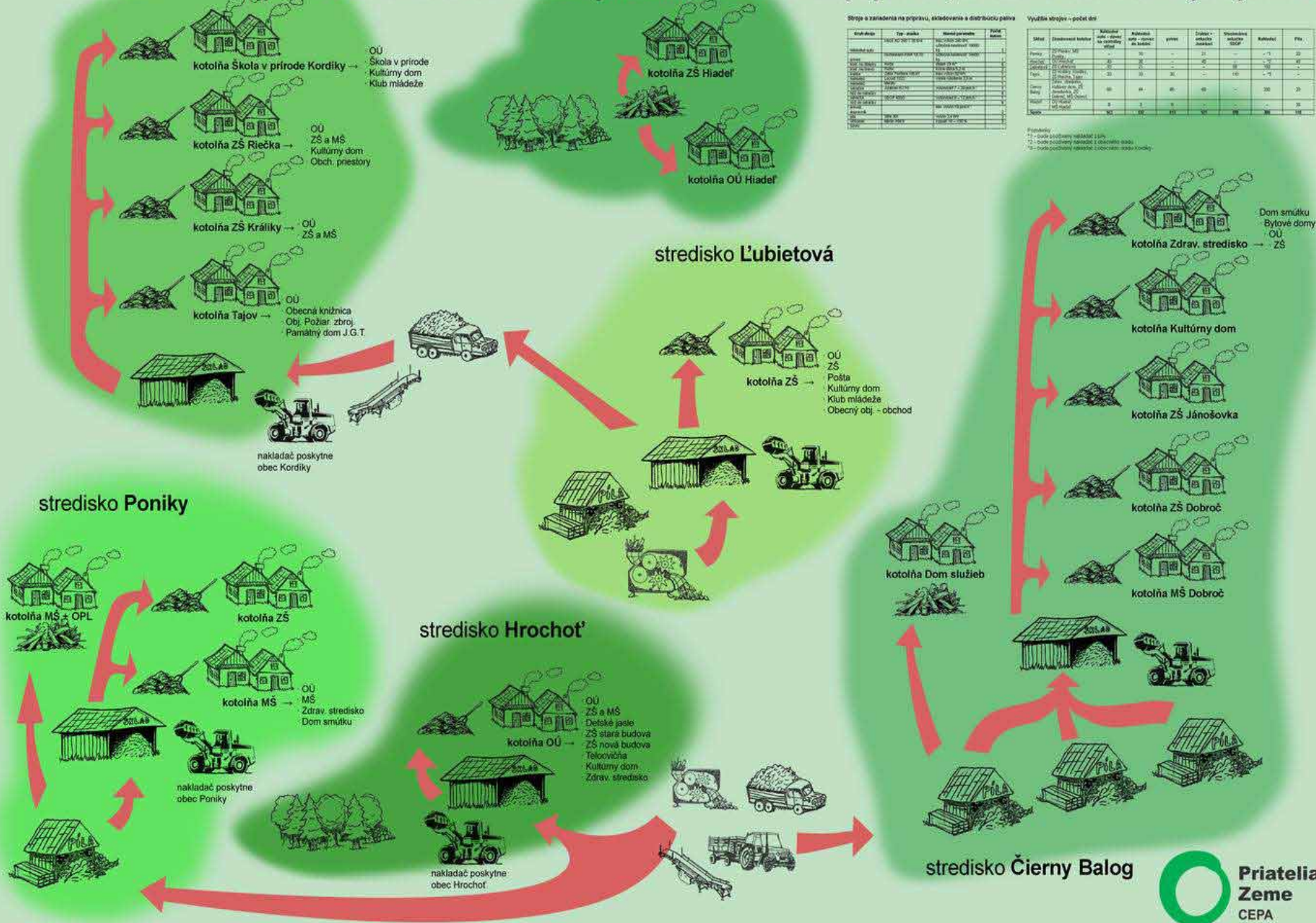
HEATING OF PUBLIC FACILITIES
(MUNICIPALITIES)

← CLEAR AND LONG-TERM RELATIONSHIPS
BINDING AND ENFORCEABLE AGREEMENTS →

← CLEAR AND LONG-TERM RELATIONSHIPS
BINDING AND ENFORCEABLE AGREEMENTS →

Schéma prípravy, skladovania a distribúcie paliva

Projekt "Rekonštrukcia kotolní obecných budov v okolí Banskej Bystrice", Združenie obcí Bioenergia Bystricko



Stroje a zariadenia na prípravu, skladovanie a distribúciu paliva

Stručný popis	Typ stroja	Model parametre	Ročná kapacita
1.1	1.1	1.1	1.1
1.2	1.2	1.2	1.2
1.3	1.3	1.3	1.3
1.4	1.4	1.4	1.4
1.5	1.5	1.5	1.5
1.6	1.6	1.6	1.6
1.7	1.7	1.7	1.7
1.8	1.8	1.8	1.8
1.9	1.9	1.9	1.9
1.10	1.10	1.10	1.10
1.11	1.11	1.11	1.11
1.12	1.12	1.12	1.12
1.13	1.13	1.13	1.13
1.14	1.14	1.14	1.14
1.15	1.15	1.15	1.15
1.16	1.16	1.16	1.16
1.17	1.17	1.17	1.17
1.18	1.18	1.18	1.18
1.19	1.19	1.19	1.19
1.20	1.20	1.20	1.20
1.21	1.21	1.21	1.21
1.22	1.22	1.22	1.22
1.23	1.23	1.23	1.23
1.24	1.24	1.24	1.24
1.25	1.25	1.25	1.25
1.26	1.26	1.26	1.26
1.27	1.27	1.27	1.27
1.28	1.28	1.28	1.28
1.29	1.29	1.29	1.29
1.30	1.30	1.30	1.30
1.31	1.31	1.31	1.31
1.32	1.32	1.32	1.32
1.33	1.33	1.33	1.33
1.34	1.34	1.34	1.34
1.35	1.35	1.35	1.35
1.36	1.36	1.36	1.36
1.37	1.37	1.37	1.37
1.38	1.38	1.38	1.38
1.39	1.39	1.39	1.39
1.40	1.40	1.40	1.40
1.41	1.41	1.41	1.41
1.42	1.42	1.42	1.42
1.43	1.43	1.43	1.43
1.44	1.44	1.44	1.44
1.45	1.45	1.45	1.45
1.46	1.46	1.46	1.46
1.47	1.47	1.47	1.47
1.48	1.48	1.48	1.48
1.49	1.49	1.49	1.49
1.50	1.50	1.50	1.50

Využitia zdrojov - počet domov

Stĺpec	Stĺpec	Kapacita	Kapacita	Dobrych	Stredných	Kapacita	Pln.
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88
89	90	91	92	93	94	95	96
97	98	99	100	101	102	103	104
105	106	107	108	109	110	111	112
113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128
129	130	131	132	133	134	135	136
137	138	139	140	141	142	143	144
145	146	147	148	149	150	151	152
153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168
169	170	171	172	173	174	175	176
177	178	179	180	181	182	183	184
185	186	187	188	189	190	191	192
193	194	195	196	197	198	199	200

Prílohy:
 1 - zoznam kotolní a kapacita
 2 - zoznam kotolní a kapacita
 3 - zoznam kotolní a kapacita

Expected economic benefits

- Inflow of larger public funds into marginalized area
4,607 MEUR: 75 % ERDF + 20 % state + 5 % municipalities
- Modernization of 17 obsolete heating systems supplying 42 public facilities provides a guarantee for long-term safe operation of boilers (operation costs will increase by 8 %)
- Expenses for fuel will decrease by 57 % (finances stay in the region)
- Price for 1GJ will be lower by 17 % if compared with heat price provided by largest supplier in the region



Printella
Zeme
CEPA

CEE

bankwatch
network

Expected environmental benefits

- Reduction of CO₂ emissions by 1.705 tons per year
- Annual production of heat for 42 public facilities (26.344 GJ/year) will be fully covered by renewables
- Annual consumption of wood will be completely supplied locally (3.129 tons of wood-chips + 148 tons of piece-wood)



Expected social benefits

→ 10 new jobs will be created

→ Modernization of heating systems will ensure further operation of public buildings which could otherwise be reduced in winter due to emergency conditions of current heating systems



Expected political benefits

- Regional partnership was established providing a good model for further municipal fundraising in the region
- Inspiring example of regeneration of local economy for other regions with similar natural conditions
- Alternative to large-scale centralized energy actions funded from EU Structural Funds



Printella
Zeme
CEPA

CEE

bankwatch
network

Problems

- Long time needed to convince municipalities and their representatives
- Lack of similar examples on national level
- Lack of funds for development of technical documentation and SF application
- Complexity of technical solution
- Lack of municipal capacities to cooperate on adequate level
- Legal obstacles (uncertainty in ownership of properties)
- Relatively large area covered by the project
- Difficulties in facilitation of partnership dialogue among many partners (municipalities, NGOs, companies)

Process

Idea preparation (11/03 – 05/05):

Political assessment, preliminary technical design, preliminary analyses, partnership building, fundraising for preparation phase

Project development (06–12/05):

Public procurement, technical documentation, application for ERDF

Current situation:

Project approved but due to a lack of funds shifted to project pipe-line, internal Government audit requested by municipalities



Printella
Zeme
CEPA

CEE

bankwatch
network

What's next?

A move from **project approach** to **systemic approach**

E4C project:

- regional energy strategy incl. priority action plan
- political support of the region
- suitable financing schemes and organizational & support models

Selected region prepared for **high-quality absorption** of structural support in 2007 - 2013



Printella
Zeme
CEPA

CEE

bankwatch
network

For more information:

Juraj Zamkovsky, Executive Director

Friends of the Earth-CEPA

Ponicka Huta 65, 976 33 Poniky, Slovakia

tel/fax: +421 48 4193 324

e-mail: zamkovsky@changenet.sk

www.foe.sk/cepa

