



REGIONALNA ENERGETSKA AGENCIJA
NORTH-WEST CROATIA
SJEVEROZAPADNE HRVATSKE
REGIONAL ENERGY AGENCY

Project NEWLIGHT (ELENA) – Reconstruction of Street Lighting in 57 Croatian Cities and Municipalities

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REGEA

Energy Efficiency Finance Market Place
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Introduction – Main Facts

ELENA financed

REGEA – EIB contract: October 2015

Duration: 36 months

Final Beneficiaries: 57 cities and municipalities

Overall goal: Investment in reconstruction of street lighting systems, min. 20 mil eur

Introduction – Main Facts (2)

**Total budget:
790 000 EUR (TA)**

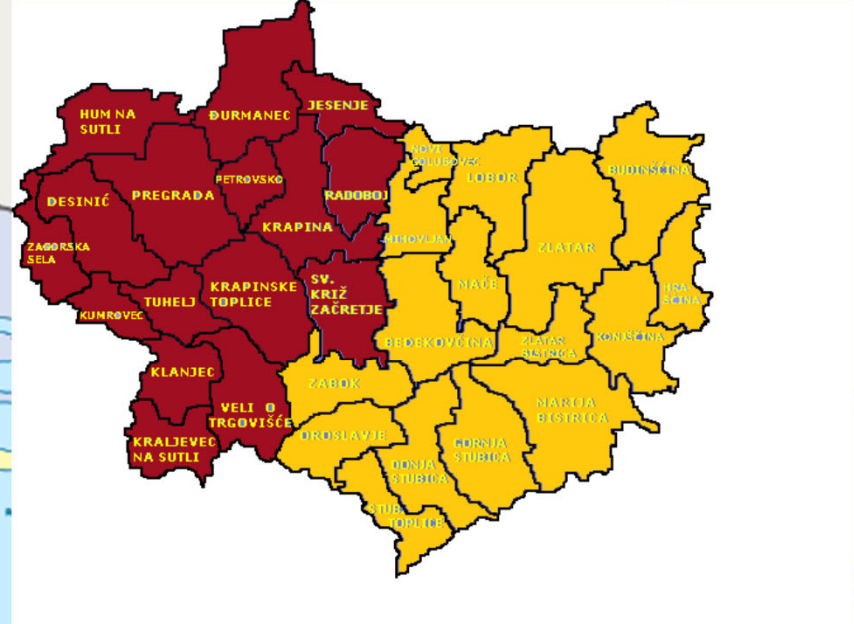
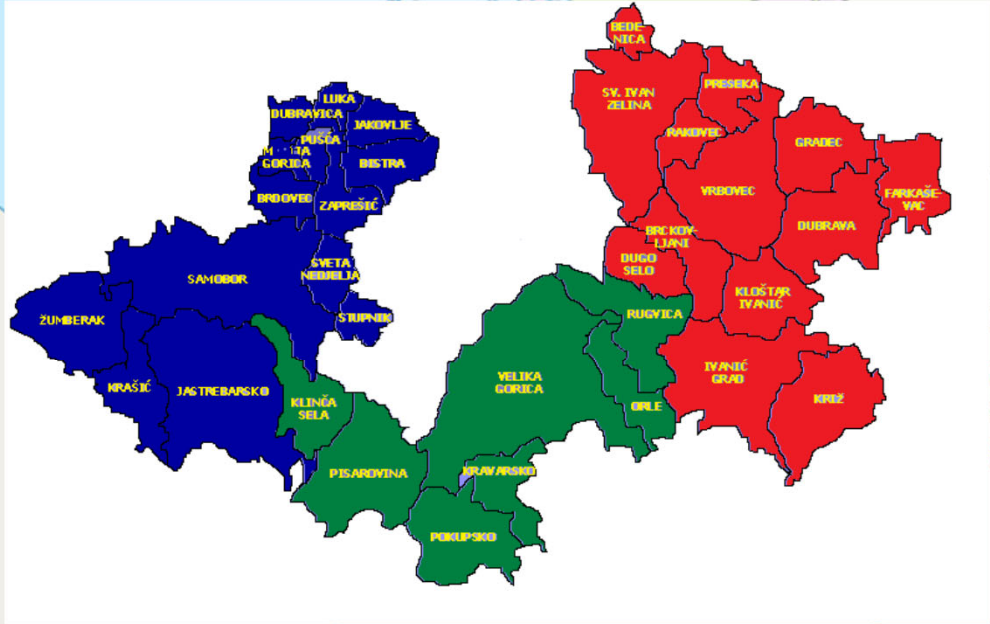
EIB co-financing: 711 000 EUR (90%)



Co-funded by the Intelligent Energy Europe
Programme of the European Union

**Co-financing from regional authorities:
Zagreb County and Krapina-zagorje County
79 000 EUR (10%)**





Main Activities

Phase I – Implementation of energy audits

Subcontracting (public procurement selection)

Duration 12 months

Phase II - ESCO (PPP) documentation preparation

Duration 12 months

Phase III - Public procurement for ESCO services

Based on PPP methodology

Duration 12 months

Key Feature: Bundling

57 Croatian cities and municipalities

Better investment opportunity (20 mil eur)

Transaction costs lower

Risks lower (standardised methodology and procedures)

Improved access to finance

Challenges

Large (!) number of stakeholders

Project management and communication (!!!)

Long preparation and decision making

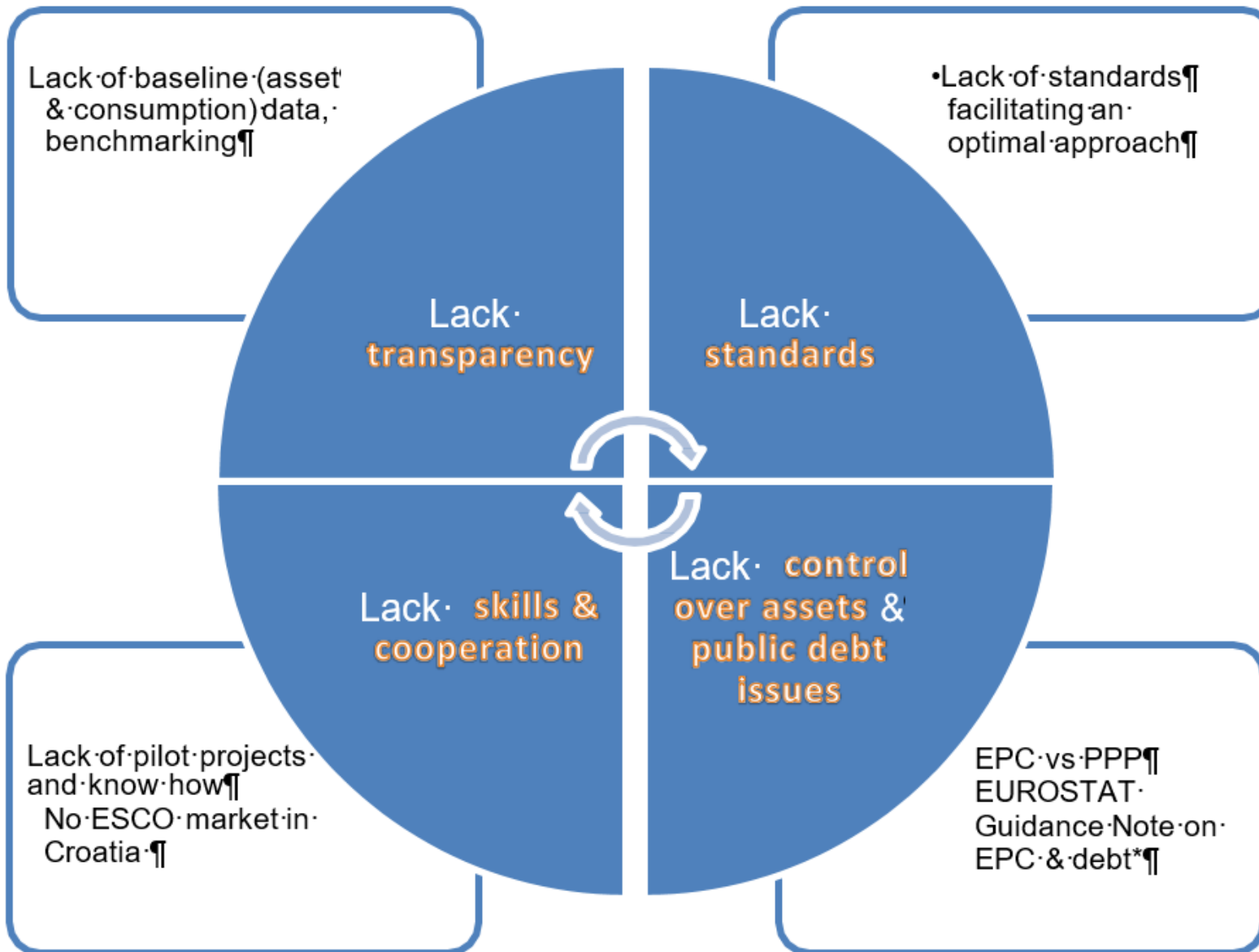
More Challenges?

Insufficient Baseline data - methodology for energy audits had to be developed

Undeveloped ESCO market in Croatia – facilitation service mandatory

Low energy prices (50% less than on EU average) resulting in long payback periods in ESCO projects

Legal aspects of PPP – no projects (good examples) to learn from



Benefits for cities/municipalities

Project results/outputs:

1. Energy audits of street lighting systems

App. 60.000 luminaires in total

App. 55% of total project cost (!)

Specialized software/mobile app developed, GIS based

2. Development of Action plan for street lighting reconstruction

For each city/municipality

Officially adopted by city/municipality council

Benefits for cities/municipalities (2)

3. Preparation of project documentation for installation of new lighting

Where needed, to achieve lighting standards

4. Preparation of reconstruction of existing street lighting

Based on ESCO/PPP model, no city budget for investment
Preparation of tender documentation, legal advice

5. Support in obtaining co-financing

ESIF, national Fund for Env. Protection and En. Efficiency
Impact: lower ESCO/PPP remuneration and/or shorter contract duration

Recommendations

1. Cooperate on regional level

Use regional authorities for bundling process (!)
Availability of skills, technical design capacity, avoid
'reinventing the wheel', reach economies of scale

2. Use standard methods/procedures

Lower (percieved) risks, facilitated financing, lower costs of
auditing and uniform data, existing GIS integration

3. Consider all legal options

EPC/ESCO, PPP, O&M contracts with energy efficiency
investment, leasing, public debt,...

Recommendations (2)

4. Consider smart city aspects

Opportunities (!) – wi-fi, sensors, e-charging infrastructure
Potential revenue sources, but... data confidentiality issues

5. Communication, communication, communication

Cities/municipalities need to be guided/coached
Citizens inclusion/participation

6. Take into account election calendar (!)

Also, city budget process (connected with public procurement)



NEWLIGHT short video

Thank you for your attention!

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