Interreg
Danube Transnational Programme
EcoInn Danube

Recommendation for small IT enterprise to offer their services to the public sector market

This recommendation package supports small IT Croatian SME for finding the way of cooperation with public institutions on energy recovery

Keywords: Energy recovery; public sector buildings; smart houses; energy savings; energy costs reducing; energy efficiency; Energy Service Company (ESCO)

Aims of this recommendation

The aim of this package is to introduce possibilities for small IT enterprise to find cooperation with public institutions on energy recovery of public sector buildings.

Target group of this recommendation package

Businesses with a specific eco-solution

Background to the recommendation package

The general objective of EcoInn Danube project is to increase the cooperation of innovation actors in the field of eco-innovations with special emphasis on the development and application of ecotechnologies in the Danube Region.

Results of recommendation packages will support the generation and development of ecotechnologies based on environmental needs.

The existing building fund in the Republic of Croatia represents the single sector with the highest potential for energy saving (most of the buildings in Croatia are rated as E or F energy class, but many of them in the G class).

Quick read

Croatian SME software package is a tool for monitoring, analysis, control and optimization of energy consumption within a building. As the existing building fund in Croatia represents the single sector with the highest potential for energy savings, there are few possibilities how this cooperation can be realized:

- Tracking tenders and submitting bids
- Becoming an Energy Service Company (ESCO)
- Establishing cooperation with an ESCO Company

According to the “Decision on the provision of the energy reconstruction program of the public sector building for period 2016 - 2020” the focus is on raising the rate of renovation of buildings with an emphasis on public sector buildings which, due to their visibility in public life should serve as a model in the implementation of energy efficiency measures. The aim of the Program is to raise the level of energy recovery activities to 3% of the public sector building fund annually, reduction of energy consumption for cooling/heating of renovated buildings public sector up to 70%, or annual savings of about 50 GWh.

According to the overall situation in Croatia, and big potential in the public sector, there’s a great opportunity for the IT enterprise to offer their services. IT enterprise offers, among other things, tool for monitoring, analysis, control and optimization of energy consumption within the building and is fully in line with the international standard for energy management ISO 50 001.

Summary description

Croatian SME was founded in the year 2015 as the sequel of three decades lasting family business in providing mid-scale electrician services. Experience gained in that line of business provided a great foundation for further development of Croatian SME. Thus, they invested all of their resources, knowledge and skills, as well as modern technology into their new field of operations. The company's main business activities are 4Dx technology and Screen X cinemas based on the "turnkey" approach, the development of energy management systems, e-mobility software design, design and manufacturing decorative lighting design, programming and installation of electrical works for smart houses and making feasibility studies on energy management.

This IT enterprise is looking for a possibility to expand its business with energy consumption monitoring system service in public sector buildings.

Summary of eco-knowledge, eco-solution or eco-technology featured in recommendation package

Croatian SME software package is a tool for monitoring, analysis, control and optimization of energy consumption within a building and is fully adapted to the international standard for energy management ISO 50 001. Through responsible monitoring of system operations in real time, reporting, alarming and providing professional assistance, Croatian SME tool will contribute to lower operational costs. The anticipation of system operations based on measured parameters can detect potential problems and therefore minimize human-induced errors as well as the risk of appearance of unwanted scenarios. The Croatian SME tool can provide a great deal of information to energy managers in the decision-making process; how to minimize the cost and enhance the reliability of the system.

The systematic approach to energy issues will contribute to procedures that aim to reduce energy costs. Energy consumption analysis in real time and on hotspots is necessary to measure in order to create the system for energy management. Daily, weekly, monthly or annual reports provided in PDF format and delivered via e-mail just in time and in suitable volume – that is what this system can provide.

Energy management is the systematic path toward constant care of energy consumption. In order to have all the right answers about energy consumption (where and when energy is consumed, what type of energy?), it is necessary to monitor the consumption on the hotspots.

Energy consumption analysis in real time and on hotspots is necessary to establish systematic energy management. The analysis is made of:

- Building selection and counters to be monitored

Interreg
Danube Transnational Programme
EcoInn Danube

Project co-funded by the European Union funds (ERDF and IPA)

- Data gathering related to consumption (electrical energy, water, heating oil, temperature, humidity, air pressure, CO2, …)

- Analysis of gathered data and defining the goals / expected savings

- Interpretation of analysed data.

The main purpose is to increase energy efficiency including passive and active energy efficiency measures.

With software for energy consumption monitoring public buildings can increase their energy efficiency and therefore can reduce energy costs which drive to lower costs on a regional and national level and less pressure on the state budget in next 30 years.

Summary of status of knowledge transfer

As one of PI REDEA's activities was consultations and implementation of EU projects for the private sector, Croatian SME was one of the beneficiaries. We defined the needs for the enterprise and decided to make a recommendation package on how to expand their business to public sector buildings.

Options and scenarios

There are three possible options for establishing contacts and cooperation with the public sector:

1. Tracking tenders and submitting bids

According to the "Decision on the provision of the energy reconstruction program of the public sector building for period 2016 - 2020", the Program is implemented by The Environmental Protection and Energy Efficiency Fund (EPEEF). The fund is allocating funds through interest-free loans, subsidy, help and donation, based on the public tender.

In the "Energy efficiency plan of Međimurje County for the period from 2017 to 2019", one of the planned measures is "Energy Renewal and Use of Renewable Energy Sources in Buildings owned or co-owned by the Međimurje County, or the building institutions and/or enterprises where the county is founder". The main task for Croatian SME is to track future tenders and submitting bids.

2. Becoming an Energy Service Company (ESCO)

The ESCO (Energy Service Company) offers in its business scope a wide range of comprehensive energy solutions that include: designing and implementing energy saving, energy storing, production and energy projects and managing energy project risks.

The particularity of these projects is that they are financed from the savings realized. Most often, a time period of five to fifteen years is required to close the financing cycle (depending on the client and the project), and the savings achieved are included in reducing energy costs and maintenance.

Energy service providers operate in the private and public sector, that is in the field of building (schools, kindergartens, offices, universities, hospitals, hotels, etc.), public lighting, industry and energy supply systems (district heating, cogeneration).

The condition for becoming an ESCO Company:

- a company operates as an energy service provider defined under the Energy Contracting and Energy Services Regulation and the Energy Efficiency Act (Official Gazette 127/2014)

- energy savings which are achieved as a result of the company's projects are registered in the SMIV system.

3. Establishing cooperation with an ESCO Company

Should Croatian SME not have conditions to become an ESCO company yet, it can establish cooperation with one

About the EcoInn Danube project

The objective of the EcoInn Danube project is to increase the cooperation of innovation actors in the field of eco-innovations with special emphasis on development and application of eco-technologies in the Danube Region.

http://www.interreg-danube.eu/approved-projects/ecoinn-danube

Interreg
Danube Transnational Programme
EcoInn Danube

Project co-funded by the European Union funds (ERDF and IPA)

and through this cooperation can provide an energy consumption monitoring system service.

Summary of recommendation(s)

- Follow tenders and submitting projects
- Becoming an ESCO company
- Establishing cooperation with an ESCO company

This way, Croatian SME can expand their services on the public sector. According to the Energy Efficiency Act, every self-government unit and large city has to prepare a plan for energy efficiency so there's a big market potential for expanding their business.

In-depth details / explanations of recommendations with links

1. Tracking tenders and submitting bids

All tenders are submitted and published at the Electronic Public Procurement of Republic of Croatia website (EOJN) (https://eojn.nn.hr/Oglasnik/). The first step is to make a free registration in order to download tender documents, attachments or put the process into favourites. The next step is to search for relevant tenders. If all the conditions are met, the next step is to fill out the offer and collect all the necessary documentation. In order to be as competitive as possible, it is important to track all the potential applicants/competitors on the market. After collecting all the documents and filling out the offer, it is necessary to submit an offer respecting the delivery deadline. All the instructions for Applicants are available at this link: https://help.nn.hr/support/solutions/articles/12000028500-upute-za-ponuditelje

The greatest risk of submitting an offer is that the company will not have the most favourable offer according to the criteria of the tender.

2. Becoming an Energy Service Company (ESCO)

If the enterprise fulfils all of the conditions of becoming an ESCO (according to Energy Contracting and Energy Services Regulation (https://narodne-novine.nn.hr/clanci/sluzbeni/2015_01_11_212.html) and the Energy Efficiency Act (Official Gazette 127/2014 (https://narodne-novine.nn.hr/clanci/sluzbeni/2014_10_127_2399.html)), and the energy savings which are achieved as a result of company's projects are registered in the SMIV system (http://cei.hr/smiv-sustav-mjerenje-pracenje-i-verifikaciju-usteda-energije/), the next step is to fill in the Application questionnaire in the Service Provider List (https://www.enu.hr/ee-u-hrvatskoj/tko-je-tko-ee-rh/pruzatelji-energetske-usluge/). Being on that list allows greater visibility to the company and a bigger possibility for engagement in the project.

3. Establishing cooperation with ESCO Company

If the enterprise doesn't fulfil all the conditions of becoming an ESCO, it can become a partner to one (or more). The whole list (database) of ESCO companies is available on https://www.enu.hr/ee-u-hrvatskoj/tko-je-tko-ee-rh/pruzatelji-energetske-usluge/, so Croatian SME can create an offer and send it to the most interesting ESCO Company.

Conclusions of recommendations

Providing services to public sector - increasing energy efficiency in the public sector is a growing trend, so providing the energy consumption monitoring system service in public sector buildings is a good opportunity for business expansion of Croatian SME.

Interreg
Danube Transnational Programme
EcoInn Danube

Project co-funded by the European Union funds (ERDF and IPA)

Annexes

https://help.nn.hr/support/solutions/articles/12000028500-upute-za-ponuditelje

https://narodne-novine.nn.hr/clanci/sluzbeni/2017_03_22_508.html

https://www.enu.hr/wp-content/uploads/2016/02/Upute-za-izradu-godi%C5%A1njih-i-akcijskih-planova-energetske-u%C4%8Dinkovitosti.pdf

https://www.menea.hr/wp-content/uploads/2018/01/Akcijski-plan-energetske-u%C4%8Dinkovitosti-Me%C4%91imurske-%C5%BEupanije-za-razdoblje-od-2017.-do-2019.-godine_final.pdf

https://narodne-novine.nn.hr/clanci/sluzbeni/2015_06_71_1368.html

https://narodne-novine.nn.hr/clanci/sluzbeni/2014_04_48_929.html

https://www.enu.hr/javni-sektor/obaveze/

http://cei.hr/upload/2016/01/smiv_upute_za_korisnike_56a5f93eb2208.pdf

http://cei.hr/smiv-sustav-mjerenje-pracenje-i-verifikaciju-usteda-energije/

Date of recommendation package

1st March 2019

Author

Public Institution REDEA

About EcoInn Danube recommendation packages

Recommendations in the context of the EcoInn Danube project are useful suggestions and proposals on how to bring eco-solutions into commercial value, particularly through forms of knowledge transfer.

Recommendation packages relate to specific eco-solutions, specific problems or specific areas within technology transfer.

Partnership guidance type:

This type of recommendation package aims to aid successful interaction between specific demand and supply side stakeholders. It contains recommendations and information about „how" to establish partnerships related to a specific eco-knowledge bundle or eco-technology.

Pitch type:

This type of recommendation package aims to aid successful knowledge transfer and/or commercialisation for a named stakeholder. It contains recommendations and information about „how" to establish partnerships related to the kind/size/location of potential partners and a specific eco-knowledge or eco-technology.

Events, consultations and interactions type:

This type of recommendation package aims to aid successful eco-knowledge transfer by focusing on a given issue, area or topic related to knowledge transfer.

About the EcoInn Danube project

The objective of the EcoInn Danube project is to increase the cooperation of innovation actors in the field of eco-innovations with special emphasis on development and application of eco-technologies in the Danube Region.

http://www.interreg-danube.eu/approved-projects/ecoinn-danube

Interreg
Danube Transnational Programme
EcoInn Danube

Project co-funded by the European Union funds (ERDF and IPA)