D.T4.1.2.

ANALYSIS OF EXPECTATIONS

Croatian Case Study

in term of training and direct assistance

Made by REGEA on 29/08/2019

ANALYSIS OF EXPECTATIONS- CROATIA (DOCUMENT)

A) METHODOLOGY

The analysis of feedback is essential for determining what are the expectations of participants from the workshop. The expectations help to improve the effectiveness of the workshop.

REGEA team used the following approach to collect feedback to the workshop from public administration and operators:
- Preparation of a list of participants
- Sending the first mail asking if they are interested in a workshop
- Telephone call and personal interviews for getting feedback

The feedback includes the prepared questions and data on REEF 2W from Analysis of Expectations Template made by REGEA.

We interviewed 7 confirmed participants.

B) RESULTS (THEMATIC AREAS)

On question: "What thematic area from REEF 2W project interests you most (you can choose more than one)":

a) **integration and processes optimization** of wastewater treatment plants and municipal waste management systems.

b) **sharing knowledge and competences** for conceiving WWTP as plants generating renewable energy for own needs and even more (WWTP renewable energy positive)

c) studying and developing models of WWTP **maximizing renewable energy production** through processes compatible to different input biomass types.

d) studying and developing models of WWTP **diversifying energy outputs** to manage different forms of energy and vectors (electricity, heat, bio-methane, hydrogen)

e) modelling WWTP taking into account internal processes integration and technology hybridization to **obtain relevant energy savings.**

f) **modification of WWTP to accept organic fraction of urban waste**, recovering more energy, optimizing water cleaning process and stabilizing treatment costs;

g) **revamping of the sludge line of WWTP** to receive the organic fraction of urban waste, mixed with public green waste, in order to improve biogas, to be turned in bio-methane and feed existing grids;

h) Improvement of technologies and processes, e.g. **implementation of a pre-treatment in the sludge process, aimed at generating a mix of energy outputs** (biogas, electricity, excess of heat to be used for drying sludge, bio-methane through the application of new cleaning technologies);

i) **Applying additional energy efficiency/energy production models** from renewable sources such as solar PV systems or wind turbines on existing WWTPs sites.

j) demonstration of the **validity and effectiveness of models**

k) **overcoming differences in the legal and administrative constraints** between waste water treatment and organic solid waste treatment and removing barriers standing in the way of implementation of mentioned models

l) **impact on local community:** making these energy consuming plants not only more efficient or self-sustainable, but also producers of surplus of renewable energy, preferably to be used in local territories becoming key enablers for virtuous low-carbon local communities.

m) **exchange of information and knowledge** between countries where an integrated approach is still at the beginning (i.e. Croatia, Czech Republic) and other countries where experiences in this field are instead more advanced, and where some good practices already exist (i.e. Italy, Austria, Germany)

we got following answers:
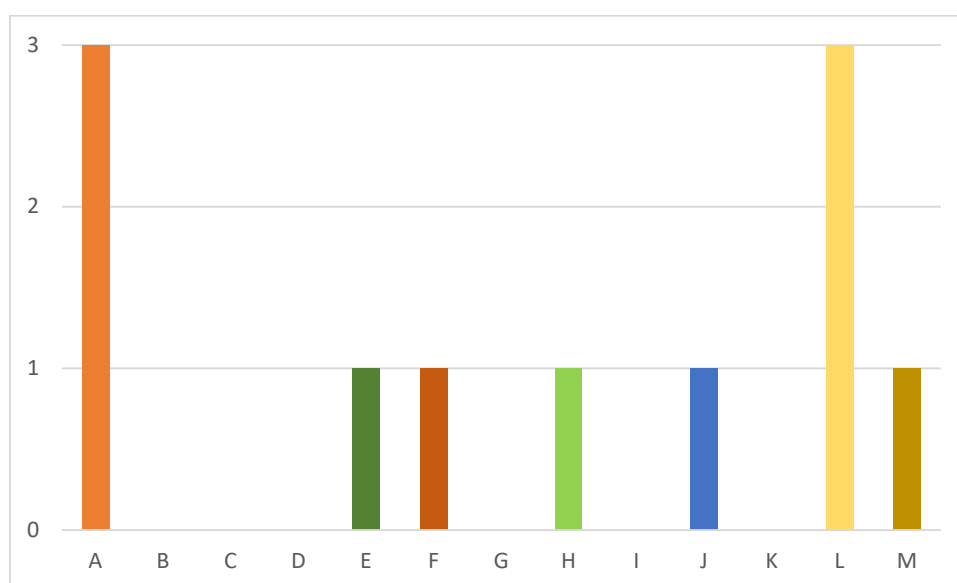
Majority of participants find most interesting thematic areas of:

- **integration and processes optimization** of wastewater treatment plants and municipal waste management systems and
- **impact on local community:** making these energy consuming plants not only more efficient or self-sustainable, but also producers of surplus of renewable energy, preferably to be used in local territories becoming key enablers for virtuous low-carbon local communities.

Then follows 5 thematic areas covering:

- **exchange of information and knowledge,**
- **demonstration of the validity and effectiveness of models,**
- **implementation of a pre-treatment in the sludge process, aimed at generating a mix of energy outputs,**
- **modelling WWTP to obtain relevant energy savings and**
- **modification of WWTP to accept organic fraction of urban waste.**

C) RESULTS (PERSONAL FEEDBACK)

On questions from Personal Feedback we got these answers:

1. **Tell us something more about your job and position?**
   Out of 7 interviewed participants 1 is deputy major, 4 are heads of administrative departments and 2 are municipal communal officers

2. **Are this themes from REEF 2W relevant for your everyday job and how can you put this into connection?**
   Out of 7 interviewed participants 5 see connection with their everyday job, 1 sees connection to some extent, 1 sees small connection. Connection is seen on the fact that they live and work in municipalites that are in the area of pilot project and/or that they work is related to communal infrastructure.

3. **What you expect from education/training on this project?**
   All expect to gain new knowledge both regarding REEF 2W project and solutions as well as new knowledge on energy efficiency, renewable energy, biowaste and wastewater management issues.

4. **What are you preffered educational/training techniques?**
   Preffered educational/training techniques are: presentations, (interactive) team-workshops, case studies.

5. **Do you consider yourself proactive/interactive person? What is your experience regarding education in teams/working in teams?**
Preffered educational/training techniques are: presentations, (interactive) team-workshops, case studies.

6. **How this project and knowledge and experience gained from it can help you in your everday work?**
5 out 7 interviewed see clearly at this point how knowledge and experience gained from this training and project can help them in their everyday work, 2 don't see this clearly at this point.

7. **How would you, from your perspective evaluate effects of this project on your local community?**

4 out of 7 see effects and think that project is important for their community, 3 don't see effects on community at this stage.

8. **Do you think that community is aware enough of this project, if not how can we/you improve this?**
6 out of 7 think that community is not aware of the project. They think that there should be more information (even education) about project to local communities. Also they see relevance of the project on regional and national scale.

9. **Is there something you want to ask us?**

7 out of 7 did not have anything to ask.

10. **Do you need clarification on anything regarding REEF 2W project?**

7 out of 7 did not need clarification at this point.

D) CONCLUSION

Analysis of Expectations was helpful at some extent. Feedback showed that participants knowledge on matter is low but that they are ready and willing to learn. One of the reasons they find this project interesting is because they find importance of it for their local communities.