



## SUSTAINABLE FUTURE FOR KUPA VALLEY

### EKO LIBURNIA, CROATIA

### SECOND REPORT

Covering period

From 15<sup>th</sup> October, 2001 – 31<sup>st</sup> January 2002

1. Eko Liburnia has organized the 1<sup>st</sup> Project workshop titled “Energy and Sustainable Development of the Kupa/Kolpa Valley” in Pension “Lipovac” in Gerovo (Commune of Cabar) from 18<sup>th</sup> –19<sup>th</sup> October 2001. 23 participants attended the workshop: 8 from Croatia, 13 from Slovenia and 2 from Denmark. As organizers we were a little bit disappointed due to the bad response of the project area communes` and Croatian NGOs representatives. In September/October 2001 Eko Liburnia sent over 100 invitations for the workshop throughout Croatia (project communes, authorities, NGOs, forestry, wood processing industry). For this purpose the REC Office in Croatia e-mail list was also used. It seems that Croatian environmental NGOs do not find EUE and RES the most interesting topic for their daily work. However, workshop was rather successful, mostly due to the fact that representatives of governmental and scientific institutions, private sector and NGOs from three countries worked very hard together and came to the joint conclusions concerning energy issues within sustainable development of the Kupa Valley.
2. In order to include local communities into Project activities in a more active way, Ranko Tadic (coordinator) and Biljana Kulisic (administrator) have visited Croatian project area communes: Brod Moravice, Delnice and Cabar on 11<sup>th</sup> and 20<sup>th</sup> November, 2001. The aim was to inform local decision-makers about already completed and ongoing Project activities, with emphasis on results of the Project Summer Camp inquiry and Gerovo workshop. We feel that we were successful since representatives of all three communes expressed interest in Project's follow-up.
3. As part of the Project activities Biljana Kulisic has visited Denmark from 3<sup>rd</sup> –9<sup>th</sup> December 2001. Her report is attached as Appendix 1.
4. In order to insure successful continuation of cooperation Ranko Tadic hold the meeting in Zagreb with Mr. Julije Domac, BIOEN Programme Coordinator of the Energy Institute “Hrvoje Pozar” on 22<sup>nd</sup> January, 2002. With Mr. Domac a contract has been signed concerning cooperation on Project web site and publication in Croatian language. Moreover, Mr. Domac has invited us to present the paper on Project activities at the

**Second Periodical Report**

15<sup>th</sup> October, 2001 – 31<sup>st</sup> January, 2002



SLOVENSKI E – FORUM  
*Društvo za energetska  
ekonomika in ekologija*



*udruuga za razvitak eko-turizma,  
ekološke poljoprivrede i zaštite  
okoliša RIJEKA*

## SUSTAINABLE FUTURE FOR KUPA VALLEY

International Workshop titled “Socio-economic Aspect of Bioenergy Systems: Issues Ahead”, to be held in Cavtat, Croatia from 19<sup>th</sup> – 21<sup>st</sup> September 2002. The information on workshop is attached as Appendix 2.

- On 25<sup>th</sup> January 2002 R. Tadic and B. Kulisic have participated at the Project’s workshop in Kocevje. The mayors of Cabar and Brod Moravice and the vice-mayor of Delnice, showing that person-to-person approach following the Gerovo workshop was a successful one, attended the workshop. Moreover, Mr. Briski, vice-mayor of Delnice, expressed his interest that similar workshop is organized in a nearby future in his commune. For that matter R. Tadic held a meeting with Commune of Delnice representatives in Crni Lug (National Park “Risnjak”) on 29<sup>th</sup> January 2002. It was decided that Project follow-up presentation, in collaboration with Project partners and Energy Institute “Hrvoje Pozar”, would be organized in March/April 2002. During presentation Project’s web pages and a publication (*Liburna*) in Croatian language would be inaugurated (to be completed by Terra Magnifica Co. in March 2002).



SLOVENSKI E – FORUM  
*Društvo za energetska  
ekonomika in ekologijo*



*udruženje za razvoj eko-turizma,  
ekološke poljoprivrede i zaštite  
okoliša RIJEKA*

# SUSTAINABLE FUTURE FOR KUPA VALLEY

## Appendix 1

### Study Tour in Denmark

3<sup>rd</sup> – 9<sup>th</sup> December 2001

Within the project “Sustainable Development for the Kolpa Valley”, KMEK\* decided to host two Project Administrators, one from Slovenian E-Forum (Matej Kranjc) and one from Eko Liburnia (Biljana Kulišić) in Denmark, from the 3<sup>rd</sup> to 6<sup>th</sup> December 2001.

Gunnar Boyle Olesen did his best as a host and planned very efficient and tight schedule in order to offer his guests the best possible insight in Danish work and experience on the environmental field. The schedule was planned according to the interests of both guests for continuing their work based on the experience, knowledge and data gained by the Project. The main focus of the study tour was green accounting, renewable energy sources, and eco-schools.

Curriculum:

3<sup>rd</sup> December – arrival of Biljana Kulišić and Matej Kranjc

4<sup>th</sup> December

**9:00 Visit to Danish School Energy Forum within an Experimental Educational Centre**

Hosted by *Janus Hilgård* (introduction, experiences). Mr. Hilgård offered himself for organising workshops for teachers dealing with energy in their subjects (physics, chemistry...). His terms are to spend one month in the country to understand the mentality and culture before the tree day workshop. His work won't be voluntary but he is prepared to be flexible. He was the author of the web page for energy efficiency in schools (theory, practice, practical experiments that could be done in schools) – [www.energy4schools.dk](http://www.energy4schools.dk)

**14:30 Visit to Green Flag campaign secretariat, Ida Kryger**

Ida Kryger, Green Flag Coordinator gave the insight into the Campaign – the origins, Danish experience and country reports. She emphasised that each country involved in Green Flag Campaign has its own conditions to meet in order to gain the green flag. Green Flag Campaign is an on going project, which has the aim to educate students and pupils how to help the environment by the “learning by doing” principle. She pointed out that Croatia has been very active and proposed to Biljana Kulišić to contact “Lijepa naša” Association, the National Coordinator of Green Flag Campaign in Croatia. She also supplied us with a vast amount of materials (brochures, magazines, posters) but all in Danish.

---

\* KMEK = Copenhagen Energy and Environment Office, a local office connected to OVE that has been involved in green accounting in Copenhagen, Blegdamsvej 4B, 2200 Copenhagen N, ph+45-35373636.



## SUSTAINABLE FUTURE FOR KUPA VALLEY

### 18:00 Visit to KMEK Headquarters

- Overview and discussion of the today's activities and issues.

5<sup>th</sup> December

### 9:00 Presentation of KMEK, (Ann Vikkelsø)

- Presentation of Slovenian E-Forums green energy accounting program (Matej), discussions of the program and experience compared with Danish experience
- Presentation of a green accounting project for a part of Copenhagen and detailed explanations of accounts (Ann).

This 8 hours long introduction was very interesting for both guests and Ann got us very interesting in Green Accounting. It seems that Danish authorities recognised the value of green accounting, in both environmental and financial (saving) aspects. Green accounting is obligatory for every public building with over 1500 square meters. Public recognised the value of energy and therefore, every building or flat, which is on sale, has to have an energy label that describes its energy consumption efficiency.

### Appr. 18:00 Train to Aarhus

### App. 22:00 Accommodation in Hjortshoej eco-village

6<sup>th</sup> December

### 9:00 Introduction to Green Accounting for companies (private and public), related environmental certifications (ISO 14001 and EMAS), and their usefulness and limitations by **green guide** specialised in green accounting in commercial sector.

### 12:00 CERES brewery, Lars Munk and Christine Westergaard, [www.bryggerigruppen.com](http://www.bryggerigruppen.com),

Practical experience and the process of implementation of EMAS and ISO 14001, the benefits and limitations of the certifications.

### 13:00-15:00 Visit Århus municipality,

Municipal green accounting and its use in environmental management in a municipality (Uffe Rasmussen, Aarhus Municipality environmental department, Søren Nyskov, Danish Center for Urban Ecology).

Mr. Rasmussen and Mr. Nyskov in a quite friendly manner explained the background and implementation process of green accounting. The Aarhus Municipality is the leader and pioneer in green accounting and they feel quite responsible in improving the system and spreading their experience to other places in Denmark and other countries. They supplied us with Aarhus green accounting yearly report (of course, in Danish) and we spent several evenings in the eco-village in Hjortshoej translating and discussing the Report with Mr. Olesen.

7<sup>th</sup> December

### Second Periodical Report

15th October, 2001 – 31st January, 2002



## SUSTAINABLE FUTURE FOR KUPA VALLEY

### 10:30 Visit to school with energy and environment activities (Virupskolen, Hjortshøj)

This school has been saving the energy for approximately 15 years! The Principal took us on a tour showing us the system in action. They gain many benefits from the energy savings and they are motivated to continue it. All pupils (students) are included in the project at least a week per school year.

### Afternoon: Tour on eco-village project in Hjortshøj

Our hosts gave us a tour around their Eco Village. Their inhabitants managed to fulfil almost all issues stated in Local Agenda 21 – they have their own local, environmentally friendly central heating, waste water treatment, composting, organic food (plant and animal) production, their houses are all energy efficient houses built from local materials (they even cooked the paint on the traditional way)... Now they are planning to have independent electricity production.

8<sup>th</sup> December

### App. 10:00 train to Copenhagen (Mr. Olesen stayed at Hjortshøj)

Mr. Kranjc and Miss. Kulišić spent the rest of the day sightseeing and discussing green accounting

9<sup>th</sup> December

Miss. Kulišić departures from Copenhagen Airport to Croatia  
Mr. Kranjc – day off in Copenhagen

10<sup>th</sup> December

Mr. Kranjc departures from Copenhagen Airport to Slovenia

The results of the Study Tour for Biljana Kulišić (Eko Liburnia)

Miss. Kulišić set two goals inspired by the green accounting, its success in Denmark and its benefits:

- Short-term goal: simple green accounting in Primary School Fužine (within the Project area) or in any other interested public building, preferably within the Project area but not exclusively
- Long-term goal: to develop energy efficiency and renewable energy sources at Green Flag school activities.

Second Periodical Report

15th October, 2001 – 31st January, 2002



SLOVENSKI E – FORUM  
*Društvo za energetska  
ekonomika in ekologija*



*udruza za razvitak eko-turizma,  
ekološke poljoprivrede i zaštite  
okoliša RIJEKA*

## SUSTAINABLE FUTURE FOR KUPA VALLEY

### Appendix 2

# IEA Bioenergy

Task 29 – Socio-Economic Aspects of Bioenergy Systems  
Second Announcement and Call for Papers  
For the International Workshop

### *Socio-economic Aspect of Bio energy Systems: Issues Ahead*

19 – 21 September 2002

Cavtat-Dubrovnik, Croatia

*Hosted by Energy Institute 'Hrvoje Požar' Ltd., Zagreb, Croatia*



Energy Institute  
"Hrvoje Požar" Ltd  
Zagreb, Croatia

*Patronage*



Ministry of Science and  
Technology



Croatian Chamber of  
Commerce

Task 29 Website: [www.iea-bioenergy-task29.hr](http://www.iea-bioenergy-task29.hr)

**Second Periodical Report**

15th October, 2001 – 31st January, 2002



## SUSTAINABLE FUTURE FOR KUPA VALLEY

### **Background**

IEA Bio energy is an international, collaborative research programme on Bio energy ([www.ieabioenergy.com](http://www.ieabioenergy.com)). The primary goal of IEA Bio energy Task 29 (“Socio-Economic Aspects of Bio energy Systems”) is to promote the use of biomass for energy over fossil based competitor fuels in the participating countries through achieving a better understanding of the social and economic impact of bio energy systems at the local, regional, national and international level. Participating countries are Austria, Canada, Croatia, Japan, Sweden and the United Kingdom.

The Task 29 workshop in Croatia, is part of a series of workshops within Task 29 taking place on a regular basis, but also represents a final event at the end of first three-year period of the project. For more detailed information on the Task, its output, and on previous workshops, see [www.iea-bioenergy-task29.hr](http://www.iea-bioenergy-task29.hr).

### **Workshop Aims and Objectives**

The workshop represents the culmination of effort for the Task partnership and will provide the opportunity for specialists and non-specialists alike to learn and participate in an action focused on understanding the complex social and economic interactions of bio energy and community. In particular to:

- Compare and contrast approaches taken to the Task in partner countries
- Learn from Best Practice (including invited papers)
- Hear reports from student and community participants
- Plan and agree future actions and priorities (next 3 year programme)
- Link and learn about related international projects and programmes

### **Scope of the workshop; events**

Altogether, the workshop consists of several technical sessions, meetings and excursion as follows:

**Tuesday, September 17 – Wednesday, September 18** Arrival in Cavtat

**Wednesday, September 18** – Hotel Croatia, Cavtat  
17:00 - Meeting of National Team Leaders/Task 29 business session

**Thursday, September 19 – morning** - Hotel Croatia, Cavtat  
**Technical Session I: Country actions and progress reports**

**Second Periodical Report**

15th October, 2001 – 31st January, 2002



udruženje za razvoj eko-turizma,  
ekološke poljoprivrede i zaštite  
okoliša RIJEKA

## SUSTAINABLE FUTURE FOR KUPA VALLEY

...

Daniel García Alminana & Julije Domac (Spain/Croatia): **Efficient energy alternatives in Korcula**

**Thursday, September 19 – afternoon - Hotel Croatia, Cavtat**  
**Technical Session II: Country progress and students reports**

...

Hayley Myles (UK): **Socio-economic modelling of bio-energy systems**

Biljana Kulisic, Ranko Tadic (Croatia): **Public opinion survey in Gorski Kotar region**

**Friday, September 20 – morning - Hotel Croatia, Cavtat**  
**Technical Session III: International experiences, related programmes and projects**

Miguel Trossero (FAO, Rome): **Socio-economic aspects of wood energy systems in developing countries: A focus on employment**

Lunnar Anders (Norway): **WOODENMAN-joint project**

Jian Gan & Tat Smith (USA): **Comparative welfare analysis of biomass and fossil energy**

Calliope Panoutsu (Greece): **Understanding the Socio-economic rewards of bioenergy – A network of excellence**

Enio Kiukaanniemi (Finland): subject of confirmation

**Friday, September 20 – afternoon - Hotel Croatia, Cavtat**  
**Technical Session IV: Task work programme for next period**

**Facilitated discussion**

**Saturday, September 21 – Dubrovnik**  
**Social day/Excursion**