



**Advisory Assistance Programme for Environmental Protection in
the Countries of Central and Eastern Europe, the Caucasus and
Central Asia**

**Capacity building on EU environmental
legislation for local and regional self-
government in Croatia and Macedonia**

Final Report 2009

Advisory Assistance Programme for Environmental Protection in the
Countries of Central and Eastern Europe, the Caucasus and Central Asia

Project-no. (FKZ) 380 01 158
Report-no. (UBA-FB) 001390/E

Capacity building on EU environmental legislation for local and regional self-government in Croatia and Macedonia

Project February 2007 – July 2009

Final Report

by

Philipp Engewald

Baltic Environmental Forum Germany e.V.

Project Partners:

Baltic Environmental Forum Germany e.V., Osijek Greens (Croatia),
REC Croatia, Balkan Foundation for Sustainable Development
(Macedonia), REC Macedonia

Donors:

German Federal Ministry for the Environment, Nature Conservation,
and Nuclear Safety (BMU) in cooperation with the German Federal
Environment Agency (UBA)

UMWELTBUNDESAMT

This publication is only available online. It can be downloaded from
<http://www.uba.de/uba-info-medien-e/4026.html> .

The contents of this publication do not necessarily
reflect the official opinions.

ISSN 1862-4804

Publisher: Federal Environment Agency (Umweltbundesamt)
P.O.B. 14 06
06813 Dessau-Roßlau
Germany
Phone: +49-340-2103-0
Fax: +49-340-2103 2285
Email: info@umweltbundesamt.de
Internet: <http://www.umweltbundesamt.de>

Project Management: Christoph Rau (Section I 1.2)

Technical Expert: Hans-Joachim Hermann (Section I 1.2)

Dessau-Roßlau, October 2010

CONTENTS

Contents	1
Das Projekt in Kürze	2
The Project in Brief.....	3
Ukratko o projektu.....	4
Накратко за проектот	5
Shkurimisht për projektin.....	6
Project overview.....	7
Introduction.....	7
The frame of the project.....	7
Local and regional self-government	7
Why capacity building also for NGOs?.....	8
Activity report.....	9
Target group assessment.....	10
Train-the-trainers programme	11
Course: EU Principles I.....	12
Course: EU Principles II.....	12
Course: Event organization and presentation	13
Course: Presentation and facilitation.....	14
Info Days.....	15
Croatia	15
Macedonia.....	16
Seminar preparation workshops	17
Workshops in Croatia	18
First Water Management Workshop	18
Second Water management workshop.....	19
First waste management seminar	21
Second waste management seminar.....	24
Seminars in Macedonia.....	28
First waste management workshop.....	28
Second waste management workshop	29
First IPPC workshop.....	32
Second IPPC workshop	33
Energy efficiency training for Croatian trainers and local authorities	36
Study visit to Latvia on waste management for Macedonian stakeholders	39
Publications	41
EU and its environmental legislation.....	41
Croatia: The EU and environmental protection: environmental policies of the European Union.	41
Macedonia.....	42
Publications on focus topics.....	43
Croatia: EU Policy and waste management on local level.....	43
Croatia: EU Policy and Water management on local level	43
Croatia: EU Policy and energy efficiency	44
Macedonia: EU Policy and waste management on local level.....	45
Macedonia: Integrated pollution prevention and control: EU policy and its implementation at local level	45
Conclusions	47

DAS PROJEKT IN KÜRZE

Das Hauptanliegen des Projektes "Kompetenzaufbau zu EU-Umweltgesetzgebung für regionale und kommunale Selbstverwaltung in Kroatien und Mazedonien" (Februar 2007-Juli 2009) war es, NROs in diesen beiden Ländern zum EU-Umweltacquis weiterzubilden und dass diese Ihre Kenntnisse an Regionalverwaltungen und Kommunalverwaltungen weitergeben.

Das Konzept des Projektes sah vor, Trainer in Kroatien und Mazedonien, die als Multiplikatoren fungieren und die eng mit Regional- und Kommunalbehörden zusammenarbeiten, auszubilden und ihnen Wissen über den Umweltacquis, sowie die Grundprinzipien und Funktionsweise der Europäischen Union zu vermitteln. Zudem wurden zwei Themenbereiche der EU-Umweltgesetzgebung vertiefend behandelt. Die Trainer konnten danach die Informationen in ihren Muttersprachen an Mitarbeiter von Kommunen und Regionalverwaltung weitergeben.

Die Idee zu diesem Projekt lieferte ein erfolgreiches Projekt in Lettland, das mit einem ähnlichen Konzept arbeitete.

Experten aus Deutschland und Lettland bildeten die Kollegen in Kroatien und Mazedonien aus und nahmen an den Seminaren des Projektes teil, um den internationalen Informationsaustausch zu unterstützen.

Das Kompetenzaufbauprogramm setzte sich aus zwei, sich überschneidenden, Phasen zusammen. In der ersten Phase ein vierteiliges Ausbildungsprogramm für die lokalen Trainer: zwei aufeinanderfolgende Kurse über die Grundlagen, Prinzipien der EU, sowie ihrer Umweltgesetzgebung und zwei Module, um die Organisations- und Präsentationsfähigkeiten zu stärken.

In der zweiten Phase wurden fünf Informationstage in jedem Land durchgeführt und jeweils vier Seminare zu besonders relevanten Themen des Umweltacquis durchgeführt. Die Seminarinhalte waren besonders auf die Perspektive, die Interessen und die Bedürfnisse der kommunalen Selbstverwaltung zugeschnitten. Außerdem konnte eine Studienreise für Abfallexperten aus Mazedonien nach Lettland organisiert werden.

Die Spezialgebiete, die ausgewählt wurden, basierten auf den Ergebnissen einer Zielgruppenuntersuchung, sowie dem unmittelbaren Austausch mit den Teilnehmern der Seminare. Für Kroatien waren Wasser- und Abfallmanagement von besonderem Interesse und für Mazedonien Abfallmanagement, sowie die IVU-Richtlinie. Zudem konnte für die kroatischen Trainer ein Workshop zum Thema energiegerechte Siedlungsplanung durchgeführt werden.

Drei Publikationen wurden für jedes Land und speziell für die Bedürfnisse von Regional- und Kommunalverwaltungen erarbeitet und sind zum Download in elektronischer Form erhältlich: zum einen wurde jeweils eine Broschüre mit grundlegende

Informationen zur EU und dem Umweltacquis veröffentlicht, sowie jeweils zu den länderspezifischen Spezialthemen eine einzelne Broschüre. Außerdem ist die Zielgruppenuntersuchung, sowie ein Hintergrundpapier über energiegerechte Siedlungsplanung und ihre Bedeutung für Kommunen (auf kroatisch) erhältlich.

Das Projekt wurde unterstützt durch das kroatische Ministerium für Umwelt, Raumplanung und Bauwesen, das Ministerium für Umwelt und Raumplanung Mazedoniens, und den Deutschen Städtetag. Zudem trugen zahlreiche Experten privater und staatlicher Organisationen zum Erfolg einzelner Workshops und der Informationstage bei.

Die finanzielle Förderung des Projektes wurde durch das Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (BMU) und das Umweltbundesamt, die Europäische Kommission (EK) und den kroatischen Fond für Umweltschutz und Energieeffizienz (FUE) geleistet.

Finanzierung

Geber	Beitrag in EUR	Beitrag in %
BMU	181.137	67,3
EK	48.145	17,9
FUE	12.000	4,5
Eigenanteil	27.855	10,3
Gesamtbudget	269.137	

Das Projektteam setzte sich zusammen aus Mitarbeitern des Baltic Environmental Forum Deutschland (Bewilligungsempfänger und Gesamtleitung), dem Baltic Environmental Forum Lettland (Trainerausbildung und Expertise zu EU-Umweltgesetzgebung), in Kroatien des Länderbüros des Regional Environmental Center for Central and Eastern Europe (REC) und in der ersten Projektphase der Nichtregierungsorganisation Osječki zeleni. In Mazedonien nahmen die Balkan Foundation for Sustainable Development, sowie das Länderbüro des REC teil. Die lokalen Partner waren sowohl die Zielgruppe der Trainerausbildung als auch Experten, um die lokale Sichtweise und Informationen einzubringen und sie waren die Organisatoren der Veranstaltungen in ihren jeweiligen Ländern.

Wir bedanken uns bei allen Teilnehmern und Unterstützern der Veranstaltungen im Rahmen des Projekts für ihre aktive Unterstützung und ihren Beitrag zum erfolgreichen Gelingen dieses Projektes!

THE PROJECT IN BRIEF

The primary objectives of the project “Capacity-building on EU environmental legislation for local and regional self-government in Croatia and Macedonia” (February 2007-July 2009) were to increase capacities of local environmental NGOs and multiplier organizations as well as of staff of local and regional self-governments in these two EU candidate countries.

The concept of the project was to train trainers in Croatia and Macedonia, which work for multiplier organizations that closely cooperate with local and regional self-government, to increase their knowledge on general principles of the European Union environmental acquis, and to deepen two focus topics for each country. The trainers were enabled to lecture to staff of self-government authorities in their native languages.

The project idea originated from good experiences with similar actions implemented in Latvia from 2002-2007.

Foreign resource persons, i.e. the trainers and additional experts for the focus topics came from Germany (environmental experts on the focus topics for lecturing and experience exchange at workshops) and Latvia (key trainers).

The capacity building programme consisted of two overlapping phases: A training phase for the local trainers was composed of four sessions: two consecutive courses on basics, principles, and areas of the environmental *acquis communautaire*, and two modules to enhance presentation and event organization skills.

In the second phase the knowledge was brought forward to local and regional authorities in Croatia and Macedonia. Five info-days were carried out in each country to inform about basics on EU environmental legislation and for each country specific focus topic two seminars were organized. The contents of all these events were specially prepared considering the needs and demands of local and regional authorities. A study tour to Latvia was organized for Macedonian waste management experts.

The focus topics which were selected on the basis of a target group assessment and direct feedback from workshop participants covered waste management issues in both target countries, water management issues in Croatia, and Integrated Pollution Prevention and Control (IPPC) in Macedonia. A combined training and information workshop with Croatian trainers and local authority representatives on energy sound urban planning was held additionally.

Three publications were printed and disseminated among local and regional authorities in each country and are also available electronically for download. These publications covered a basic overview of EU environmental legislation, and

each of the focus topics. The publications were largely tailored to the specific situation of the countries.

Moreover, a target group assessment report from both countries is available electronically, and a background paper on energy efficient housing estate planning for local authorities in Croatia was prepared.

The project received overall support from the Croatian Ministry of Environmental Protection, Physical Planning and Construction, the Macedonian Ministry of Environmental Protection and Physical Planning, and the German Association of Cities and Towns. Experts from several other supporting organizations contributed to the success of individual workshops and info days.

Funding for the project was provided by the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU) in cooperation with the Federal Environment Agency, the European Commission (EC), and the Croatian Environmental Protection and Energy Efficiency Fund (EPEEF) and other own sources.

Funding in figures

Source	Contribution in EUR	Contribution in %
BMU	181,137	67,3
EC	48,145	17,9
EPEEF	12,000	4,5
Other	27,855	10,3
Total budget	269,137	

The project team consisted of the Baltic Environmental Forum Germany (project beneficiary and overall management), and the Baltic Environmental Forum Latvia (trainers and experts on EU environmental legislation). In Croatia, country office of the Regional Environmental Centre for Central and Eastern Europe (REC), and in the first phase also the non-governmental organization Osijek Greens. In Macedonia, the Balkan Foundation for Sustainable Development and the local REC country office were part of the project team. The local organizations were recipients of trainings, as well as providing information about the target group and situations in their country, and they were responsible for organization and logistics for local events.

We express our gratitude to all participants and supporters of the project events for their active contribution to the successful completion of the project!

UKRATKO O PROJEKTU

Primarni ciljevi projekta "Osposobljavanje lokalne i regionalne samouprave u Hrvatskoj i Makedoniji o okolišnom zakonodavstvu Europske unije" (veljača 2007. - srpanj 2009.) uključivali su jačanje kapaciteta lokalnih neprofitnih organizacija i tijela lokalne i regionalne samouprave u ove dvije zemlje kandidatkinje za članstvo u Europskoj uniji.

Koncept projekta podrazumijevao je obuku budućih trenera u Hrvatskoj i Makedoniji, zaposlenih u partnerskim neprofitnim organizacijama koje usko surađuju s lokalnom i regionalnom samoupravom, i proširivanje njihovog razumijevanja načela okolišnoga zakonodavstva EU-a, te njegove specifične primjene u nacionalnim okvirima. Treneri su osposobljeni za edukaciju tijela lokalne i regionalne samouprave na vlastitom jeziku.

Projekt se temelji na pozitivnim iskustvima sličnih aktivnosti provedenih u Latviji u razdoblju od 2002.-2007. godine.

Strani predavači, tj. treneri i dodatni vanjski stručnjaci za pojedine prioritetne okolišne teme bili su iz Njemačke (stručnjaci za pojedine okolišne teme kroz predavanja i praktičan rad na tematskim seminarima) i Latvije (glavni treneri).

Program osposobljavanja sastojao se od dvije međusobno povezane cjeline: Treninzi za buduće lokalne trenere sastojali su se od četiri radionice: dva uzastopna modula o osnovama i načelima i područjima okolišnoga *acquis communautaire*-a, te dva modula usmjerena na jačanje prezentacijskih i organizacijskih vještina.

U drugoj fazi znanje se prenosilo tijelima lokalne i regionalne samouprave u Hrvatskoj i Makedoniji. U svakoj zemlji održano je po pet info-dana u cilju informiranja o temeljima okolišnoga zakonodavstva EU-a, a u svakoj su zemlji održana i po dva ciljana tematska seminara u skladu s prioritetnim okolišnim temama. Sadržaj svih ovih događanja specifično je prilagođen potrebama i očekivanjima lokalnih i regionalnih samouprava. Za makedonske stručnjake za gospodarenje otpadom organizirano je i studijsko putovanje u Latviju.

Središnje teme seminara, odabrane na temelju procjene potreba ciljne skupine i izravne komunikacije sa sudionicima seminara obuhvatile su pitanja gospodarenja otpadom u obje zemlje, upravljanja vodama u Hrvatskoj, te integriranog pristupa nadzoru onečišćenja (IPPC) u Makedoniji. Dodatno je za hrvatske partnere i predstavnike nekoliko lokalnih samouprava održan i kombinirani trening / informativna radionica na temu energetske učinkovitosti prostornog planiranja.

Tiskane su **tri publikacije** koje su distribuirane tijelima lokalne i regionalne samouprave u svakoj zemlji, te se mogu preuzeti i u elektroničkom obliku. Spomenute su publikacije obuhvatile opći pregled okolišnoga zakonodavstva EU-a, te u svakoj državi

po dvije prioritetne okolišne teme. Publikacije su u velikoj mjeri prilagođene specifičnoj situaciji u svakoj zemlji.

Uz to, izvješće o procjeni potreba ciljne skupine u obje države dostupno je u elektroničkom obliku, a za Hrvatsku je izrađena i stručna podloga (studija) o energetske učinkovitosti planiranju na lokalnoj razini, namijenjena tijelima lokalne samouprave.

Projekt su podržali hrvatsko Ministarstvo zaštite okoliša, prostornog uređenja i graditeljstva, makedonsko Ministarstvo zaštite okoliša i prostornog planiranja te Njemačka udruga gradova ((Deutscher Städtetag). Stručnu podršku u pripremi i izvedbi pojedinih seminara i info-dana pružile su još neke institucije i organizacije.

Financiranje projektnih aktivnosti osigurano je od strane njemačkog Saveznog ministarstva za okoliš, zaštitu prirode i nuklearnu sigurnost (BMU) u suradnji sa Saveznom agencijom zaštite okoliša, Europske komisije (EK), Fonda za zaštitu okoliša i energetske učinkovitosti Republike Hrvatske (FZOEU) i iz vlastitih izvora.

Financiranje u brojkama

Izvor sredstava	Donacija u EUR	Donacija u %
BMU	181,137	67.3
EK	48,145	17.9
FZOEU	12,000	4.5
Ostali	27,855	10.3
Ukupna vrijednost projekta		269,137

Projektni tim uključivao je Baltički forum za okoliš Njemačka korisnik donacije i vođenje projekta) te Baltički forum za okoliš Latvija (treneri i stručnjaci za okolišno zakonodavstvo EU); u Hrvatskoj - lokalni ured Regionalnog centra zaštite okoliša za Srednju i Istočnu Europu (REC), a u prvoj fazi i nevladinu udrugu *Osječki zeleni*; u Makedoniji, *Balkanska zaklada za održivi razvoj* i lokalni ured REC-a također su činili dio projektnog tima. Lokalne su organizacije bile polaznici treninga, ali ujedno i izvori informacija o ciljnoj skupini projekta i situaciji u svojim državama, te zadužene za organizaciju i logistiku lokalnih projektnih događanja.

Ovim putem zahvaljujemo svim sudionicima i podržavateljima projektnih aktivnosti na njihovom aktivnom doprinosu uspješnoj realizaciji project

НАКРАТКО ЗА ПРОЕКТОТ

Примарната цел на проектот „Градење капацитети за ЕУ легислативата за животна средина за локалната и регионалната самоуправа во Хрватска и Македонија“ (Фебруари 2007-Јули 2009) беше зголемување на можностите за локалните невладини организации за заштита на животната средина, како и на бројот на организации и вработени во регионалните и локалните самоуправи во овие две земји-кандидатки за членство во ЕУ.

Концептот на проектот беше да се обучат обучувачи во Хрватска и Македонија, кои ќе остваруваат блиска соработка со локалната и регионалната самоуправа, и да го прошират нивното знаење за општите принципи и закони на Европската Унија за животна средина, и да ги продлабочат овие прашања секој во својата земја. Обучувачите беа оспособени да предаваат на персоналот во органите на локалната самоуправа на нивните мајчини јазици.

Идејата за проектот произлегува од добрите искуства со слични активности кои беа имплементирани во Летонија од 2002 до 2007 г.

Странски стручњаци, односно обучувачи и други експерти за ова прашање дојдоа од Германија (стручњаци за животна средина оспособени за предавања и размена на искуства на работилници) и Летонија (клучни обучувачи).

Програмата за градење капацитети се состоеше од две фази кои се преклопуваа. Фазата на обука за локалните обучувачи содржеше 4 сесии: 2 последователни курсеви за основните принципи, и од областа на *acquis communautaire* за животна средина, и два модули за подобрување на вештините за презентација и организација. Во втората фаза овие сознанија им беа пренесени на локалните и регионалните власти во Хрватска и Македонија. Се одржаа 5 инфо-денови во секоја земја посебно со цел да инфор-мираат за основите на легислативата на ЕУ за животна средина. Се одржаа и по два семинари со фокус на соодветни теми. Содржината на сиве овие настани беше специјално подготвена согледувајќи ги потребите и барањата на локалните и регионалните власти. За македонските експерти е можно да се организира предавање од искуства-та од Летонија.

Темите кои беа избрани врз основа на проценка на таргет група и директни повратни информации од учесниците на работилниците покриваа прашања за одлагање на отпадот во Хрватска, и Интегрирана превенција и контрола на загадувањето во Македонија. Дополнително се одржа комбинирана работилница за информирање и обука со Хрватските обучувачи и претставници од локалните власти од областа на урбаното планирање за заштеда на енергијата.

Три публикации беа испечатени и дистрибуирани помагау локалните и регионалните власти, а истите се исто така

достапни и по електронски пат. Овие публикации вршеа преглед на ЕУ легислативата за животната средина, како и на секоја од фокусните теми. Публикациите беа строго прилагодени на специфичните состојби во овие држави. Уште повеќе, за обете држави е направен електронски извештај за проценка на целната група, а беше изготвен и дополнителен текст за планирање на заштедата на енергијата во домаќинствата за локалните власти во Хрватска.

Проектот наиде на сесрдна поддршка од страна на Хрватското министерство за животна средина, просторно планирање и градба, како и од Германската асоцијација на градови. За успешноста на секоја работилница и инфо-ден придонесоа и експерти од неколку други организации.

Финансирањето на проектот беше обезбедено од страна на Германското федерално министерство за животна средина (BMU), заштита на природата и нуклеарна безбедност во соработка со Федералната агенција за животна средина, Европската комисија (ЕС) и Хрватскиот фонд за заштита на животната средина и заштеда на енергијата (EPPEF), како и од други сопствени извори.

Финансирање

Извор	Придонес во EUR	Придонес во %
BMU	181,137	67,3
ЕС	48,145	17,9
EPPEF	12,000	4,5
Други	27,855	10,3
Вкупен буџет	269,137	

Тимот на проектот се состоеше од Балтичкиот Форум за животна средина во Германија (менаџмент), и Балтичкиот форум за животна средина во Летонија (обучувачи и експерти за ЕУ легислативата за животна средина). Во Хрватска, Државната канцеларија на Регионалниот центар за животна средина на Централна и Источна Европа (REC), а во првата фаза и Невладината организација Зелените на Осијек. Во Македонија, Балканската Фондација за Одржлив Развој и државната канцеларија на REC беа дел од тимот на проектот. Локалните организации поминаа низ обуки, и им беа дадени информации за целната група и состојбата во нивната земја, а тие беа одговорни за организација и логистика на локалните настани.

Ја искажуваме нашата благодарност на сите учесници и поддржувачи на проектните активности и настани за нивниот активен придонес во успешното завршување на проектот!

SHKURIMISHT PËR PROJEKTIN

Qëllimi kryesor i projektit “Ndërtimi i kapaciteteve për legjislacionin e BE për ambientin jetësor në vetëqeverisjen lokale në Maqedoni dhe Kroaci” (shkurt 2007 – Korrik 2009) ishte ngritja e kapacitetit të organizatave lokale joqeveritare për mbrojtje të ambientit jetësor, si dhe të organizatave dhe të punësuarve në vetëqeverisjet lokale dhe rajonale në këto dy vende kandidat për anëtarësim në BE.

Koncepti i projektit ishte që të trajnohen trajnerët në Kroaci dhe Maqedoni të cilët do të realizojnë bashkëpunimin e drejtpërdrejt me vetëqeverisjen lokale dhe rajonale si dhe të zgjerojnë njohuritë e tyre për parimet kryesore dhe ligjet e Bashkimit Evropian për mbrojtjen e ambientit jetësor si dhe t’i trajtojnë këto çështje çdo kush në shtetin e vet. Trajnerët ishin të aftësuar që t’ju ligjërojnë të punësuarve në organet e vetëqeverisjes lokale në gjuhën e tyre amtare.

Ideja e projektit buron nga përvojat e mira dhe aktivitetet e ngjashme të cilat janë implementuar në Letoni prej 2002 deri më 2007.

Ekspertët e huaj, respektivisht trajnues dhe ekspertë tjerë të kësaj fushe erdhën nga Gjermania (ekspertë për ambient jetësor të aftësuar për ligjërime dhe ndërrim të eksperiencës në kuadër të punësive) dhe Letonia (trajnerët kryesor).

Programi për ndërtimin e kapaciteteve përbëhej nga dy faza të cilat përputheshin. Faza e trajnimit për trajnerët lokal përbëhej prej 4 fazave: 2 kurse për parimet bazë nga sfera e *acquis communautaire* për ambientin jetësor dhe dy module për përmisimin e aftësive për prezantim dhe organizim. Në fazën e dytë këto njohuri ju transferuan autoriteteve lokale në Kroaci dhe Maqedoni. U mbajtën 5 info ditë në çdo vend veçanërisht më qëllim për informim për legjislacionin e BE për ambientin jetësor. U mbajtën nga dy seminare me fokus në tema të posaçme. Përmbajtja e këtyre ngjarjeve ishte e posaçërisht e përgatitur duke i pasur parasysh nevojat dhe kërkesat e autoriteteve lokale. Për ekspertët nga Maqedonia mund të organizohen ligjëratat për eksperiencat nga Letonia.

Temat të cilat u zgjedhën në bazë të vlerësimit të target grupit dhe informacioneve të kthyer menjëherë nga pjesëmarrësit në punëtori mbulonin çështjet që kishin të bëjnë me trajtimin e mbeturinave në Kroaci dhe prevencionin dhe kontrollin e integruar në Maqedoni. Për më tepër u organizuan edhe punëtori të kombinuara me punëtori për informim dhe trajnim të trajnerëve kroat si dhe të përfaqësuesve të autoriteteve lokale nga sfera e planifikimit urban dhe kursim të energjisë.

Tre publikime u botuan dhe distribuan për autoritetet lokale dhe rajonale, ndërsa të njëjtat tani mund të merren edhe nëpërmjet formës elektronike. Këto publikime prezantojnë

legjislacionin e BE për ambientin jetësor si dhe të çdo fokus teme. Publikimet u adaptuan në bazë të kushteve specifike në këto vende. Për më tepër për dy vendet është përgatitur raport elektronik për vlerësim të target grupit. Po ashtu u përgatit edhe tekst plotësues për planifikim të kursimit të energjisë në amvisëritë dhe autoritetet lokale në Kroaci.

Projekti hasi në përkrahje të gjerë nga ana e Ministrisë për ambient jetësor, planifikim hapësinor dhe ndërtim të Kroacisë dhe nga asociacioni për qytete nga Gjermania. Për suksesin e çdo punëtorie dhe të info-ditëve kontribut të veçantë dhanë edhe ekspertë nga organizata tjera.

Financimi i projektit u siguroi nga ana e Ministrisë federale për ambient jetësor të Gjermanisë (BMU), mbrojtje të natyrës dhe siguri bërthamore në bashkëpunim me Agjencinë federale për ambient jetësor, Komisionin Evropian (EC) dhe Fondit kroat për mbrojtje të ambientit jetësor dhe kursim të energjisë (EPEEF), si dhe nga burimet e veta.

Finasimi

Burimi	Kontribut në EUR	Kontribut në %
BMU	181,137	67,3
EC	48,145	17,9
EPEEF	12,000	4,5
Të tjerë	27,855	10,3
Total	269,137	

Ekipi i projektit përbëhej nga Forumi Baltik për ambient jetësor në Gjermani (menaxhim) dhe Forumin Baltik për ambient jetësor në Letoni (trajnerë dhe ekspertë për legjislacionin e BE për ambientin jetësor). Në Kroaci, Zyra shtetërore për qendrat rajonale të Evropës Qendrore dhe Lindore (REC), ndërsa në fazën e parë edhe organizata joqeveritare nga Osjeku të Gjellbrit. Në Maqedoni, Fondacioni Ballkanik për zhvillim të qëndrueshëm dhe zyra shtetërore REC ishin pjesë të ekipit të projektit. Organizatat lokale kaluan nëpër trajnim dhe fituan informata për target grupin si dhe për situatën në vendin e tyre, ndërsa ishin përgjegjës edhe për çështjet organizative dhe logjistike të evenimenteve lokale.

Shprehim falënderimin tonë të gjithë pjesëmarrësve dhe përkrahësve të aktiviteteve dhe evenimenteve për kontributin e tyre aktiv për përfundimin e suksesshëm të projektit!

PROJECT OVERVIEW

Introduction

After thirty months of work, we present the final report of the project “Capacity-building on EU environmental legislation for regional and local self-government in Croatia and Macedonia”. On the following pages, we wrap up the proceedings and results, the findings and the conclusions of the actions, which were performed by the Baltic Environmental Forum Germany, the beneficiary of the grant, and its partners, the Baltic Environmental Forum Latvia, the Regional Environmental Center Country Offices in Croatia and Macedonia, the Croatian non-governmental organization Osječki zeleni, and the Macedonian partner, the Balkan Foundation for Sustainable Development.

With our work we have made an attempt to facilitate the development of greater capacities among the staff of local and regional authorities in Croatia and Macedonia responsible for environmental affairs. By training local trainers on European Union environmental legislation and the focus topics waste management (both, in Croatia and Macedonia), water management (Croatia) and the integrated pollution and prevention legislation (Macedonia), we have conducted information days and seminars for local and regional authorities, using expert knowledge from the partner countries Germany and Latvia.

The project activities were implemented with financial support of the German Federal Environment Agency, the European Union and the Croatian Environment Foundation, as well as own contributions of the implementing organizations. Further, the German Association of Cities and Towns (Deutscher Städtetag), the Ministry of Environment of the Republic of Croatia and the Ministry of the Environment of the Former Yugoslav Republic of Macedonia supported the project with resource persons or in-kind contributions. Additionally, resource persons came from the Latvian City of Cēsis, and the Latvian Union of Waste Management Companies.

The frame of the project

Origins are “Capacity-building on European Community environmental policy for regional and local administrations in Latvia” Part I (Fkz 380 01 035) and Part II (380 01 117) with a total duration from 2002-2007. A foundation for identifying the needs and priorities for Croatia and Macedonia was achieved with the help of a small preparatory project, “Support to selected countries in South Eastern Europe regarding the transposition and implementation of EU environmental legislation” (Fkz. 380 01 126), which lasted from November 2005-April, 2006.

Local and regional self-government

One of the most crucial, but often neglected elements of a functioning political system is regional and local self-government. Depending on the system, it performs executive functions and its activities affect the citizens of a state most directly. If citizens need to interact with state authorities they refer to their local administration to obtain permissions, request documents and information. Municipal service companies usually provide such essential services as for instance, water supply, sewage systems, waste collection and many other important services of everyday life. Hence, a well-functioning administration with well educated staff on the regional and local levels is indispensable to ensure a smooth and favourable functioning of a state in its entirety. Moreover, as stated in the preamble of the Charter of Local Self-Government of the Council of Europe, “(...) local authorities are [considered] one of the main foundations of any democratic regime.” And this charter has been signed by the two countries addressed in the project as laid out here, Croatia and Macedonia.

The environmental sector often shares a similar fate with communal units: it is often disregarded and notoriously

considered as 'luxury' and, therefore, subordinated to issues of economic development and other key policy areas. Environmental issues, however, are of crucial importance within EU policy making and compliance with pieces of common environmental legislation affect almost every other policy field, i.e. a deeper consideration of European environmental legislation cannot be avoided.

The experience in the countries of Central and Eastern Europe that recently joined the European Union has shown that big efforts were needed and are still necessary to make local and regional units ready to fulfil their often newly obtained obligations and duties as required by European Union legislation. The functions of local communities in the field of the environment cover a range from planning, implementing, approving, inspecting, and many more tasks, which are dependent on national and local legislations, but often the framework and sometimes even detailed responsibilities for them are set at the European level. The approximation and accession process had a fundamental impact on the everyday work of the staff in these units and similarly profound will be the change in the candidate countries for EU membership, the Republic of Croatia and the Former Yugoslav Republic of Macedonia.

Croatia was granted the candidate status in June 2004, however negotiations for accession were postponed for over a year until October 2005 due to lack of support in handing over war criminals from the Balkan war during the 1990s to the International Criminal Tribunal for the Former Yugoslavia in The Hague. Macedonia is a candidate for EU membership since December 2005.

Both countries, however, differ quite strongly from each other, even though the geographical and linguistic proximity and the most recent history form a connecting link. Yet, considering the economic capacities and potentials the differences become overt. While Macedonia currently is ahead of Croatia in integrating EU directives into national legislation, it still awaits the opening of the accession process and it may be assumed that Croatia, due to an advanced stage in the accession negotiations due to its economic advantage may still catch up more easily and most likely will have fewer problems to meet all membership requirements. For Macedonia, especially in the environmental sector, as stated by the European Commission in its recent opinion on the country's application for EU membership, "...very significant efforts will be needed, including substantial investment and strengthening of administrative capacity for the enforcement of legislation."

Why capacity building also for NGOs?

Experience has shown that NGOs often take over the role, which associations or similar forms of self-organisation take over in Western Democracies. While further education of its staff is one of the main duties of national associations of local self-government or professional unions in these countries, their Eastern European counterparts usually are not comparable in this respect. They operate with a much smaller amount of staff and are significantly less visible and hardly operate as an advocate of the interests of their members.

In contrast, Eastern European NGOs, especially in many new EU member states are often stepping into a mediating role between different stakeholders. And they were and are often supporters of EU integration of their countries, as particularly in the environmental sector, EU membership promised to improve the national legislation on environmental issues and there was (and is) the hope of better implementation and enforcement after EU membership.

Consequently, NGOs that are acting less confrontational towards state authorities have the advantage of gaining a reputation as credible partners for authorities particularly in a field which was covered in this project. The partners in Croatia and Macedonia, which were selected for this project, were having well established connections to the local and regional levels of administration in their countries and thus could further strengthen their ties and continue and expand the cooperation.

All trainers which were trained during this project committed to be available for further similar actions beyond this project's course.

ACTIVITY REPORT

The following pages give account of the activities which were carried out during the thirty months project course.

The project was monitored by a Steering Committee which met three times in total and reflected on the interim results, the proceedings and further activities.

Each project partner organization, as well as the supporting Ministries of Environment of the target countries, the supporting Association of Cities and Towns (Deutscher Städtetag) and the Donor, represented by the Federal Environment Agency were represented in these meetings.

Event Calendar

	Joint Activities	Activities for Croatia	Activities for Macedonia
2007	Kick-off Meeting Riga, Latvia (21-23 Feb)		
	Target group assessment (Feb-Jul)		
	1 st Steering Committee meeting Ohrid, Macedonia (22 May)		
	Train the trainers course I: EU principles (part I) Ohrid, Macedonia (23 May)		
	Train the trainers course II: EU principles (part II) Zagreb, Croatia (12-13 Jun)		
	Train the trainers course III: Event organization Zagreb, Croatia (14-15 Jun)		
	Train the trainers course IV Presentation and facilitation Skopje, Macedonia (14-15 Nov)		
2008		Info Day Zagreb, Croatia (14 Dec)	
			Info Day Skopje, Macedonia (26 Dec)
		Info Day Varaždin, Croatia (12 Feb)	
		Info Day Osijek, Croatia (14 Mar)	
		Seminar preparation workshop Hamburg, Germany (8-11 Apr)	
	2 nd Steering Committee Meeting Hamburg, Germany (14 Apr)		
		Workshop on water management issues I Šibenik, Croatia (3-4 Jun)	
			Seminar preparation workshop Skopje, Macedonia (17-18 Jun)
		Workshop on waste management issue I Krki, Croatia (14-15 Oct)	
		Workshop on water management issues II Krki, Croatia, (16-17 Oct)	
2009			Info Day Workshop on waste management issues I Ohrid, Macedonia (27-29 Oct)
			Info Day Workshop on IPPC I Skopje, Macedonia (3-5 Dec)
			Info Day Workshop on waste management issues II Ohrid, Macedonia (28-30 Jan)
		Info Day Pula, Croatia (12 Feb)	
		Workshop on energy efficient urban planning Hamburg, Germany (19-20 Feb)	
		Workshop on waste management II Zagreb, Croatia (31 Mar-1 Apr)	
			Info Day Workshop on IPPC II Pelister, Macedonia (11-13 May)
			Study visit on waste management Latvia (1-5 Jun)
	3 rd Steering Committee Meeting Zagreb, Croatia (8 Jun)		
		Info Day Zadar, Croatia (3 Jul)	

Target group assessment

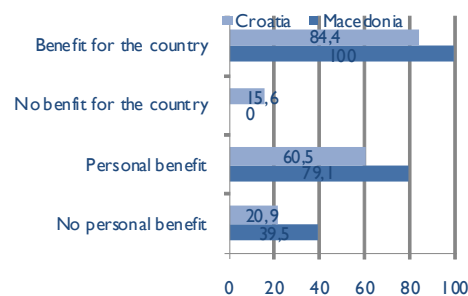
To get a better picture of the current situation in Croatia and Macedonia with regard to the knowledge about EU environmental legislation and with regard to attitudes of staff in regional and local authorities, a target group assessment was carried out. The assessment was carried out in form of a written questionnaire. The results should later serve as a basis to select the focus topics, taking those which are of greatest importance for the target group, and they should indicate the level of detail of the contents of the workshops that would be organized after the finalization of the train-the-trainers module.

A base questionnaire was prepared in English and slight adjustments were made for each target country separately, e.g. removing items connected with maritime environmental issues from the Macedonian version. The questionnaires were then translated into Croatian and Macedonian. In each country one questionnaire was distributed to each municipality.

The results showed that information in local languages about European Union legislation is not yet easily accessible on a regular basis for every respondent and this fact once more confirmed the need to train local trainers that would be capable to pass on crucial information in national languages. The lack of information was caused to some extent by the missing communication from the national ministries down to the regional and local units. Given the limited resources in the ministries, which are primarily concerned with the transposition of the acquis and the preparation of national legislation, only very little capacities are left for dissemination activities. During the project we encouraged local and regional authorities to proactively get in touch with the national competent authorities and to request for more information on their own initiative.

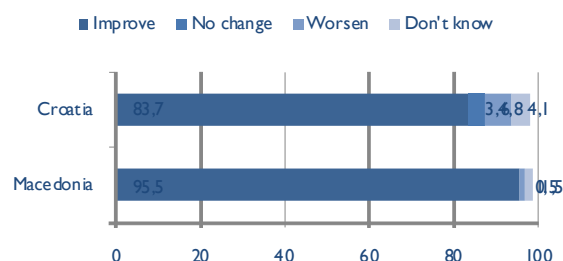
When looking at the level of knowledge about the European Union, it must be stated that by the time the survey was conducted, a principal understanding was confirmed in both countries, when looking deeper into the details, however, further explanations were needed.

Chart 1: Who will benefit from EU accession? (Responses in %)



Overall, the attitude towards an accession of their countries to the European Union was very positive and especially in Macedonia, we could observe that its membership was thought to be a benefit for the country. In order to keep the picture balanced and to avoid the promotion of the European Union as the solution for all problems, the trainers and experts repeatedly addressed this point and portrayed the EU from different perspectives.

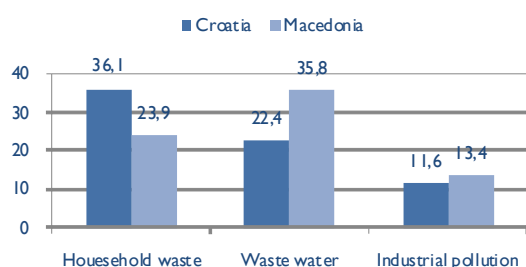
Chart 2: How will the overall situation of change after EU accession? (Responses in %)



The hopes concerning accession were also reflected in the results on expectation towards the changes that would mean EU accession for the environment.

In order to address the right topics for the focus seminars, the municipalities were asked to specify the most problematic fields on their own territory and for the whole country regarding the state of the environment.

Chart 3: Most important topics to deal with in the project (Responses in %)



These answers quite clearly singled out two topics, which were waste and waste water issues. Ranked third was the question of industrial pollution in Macedonia and industrial waste in Croatia. Given this, the initial conclusion was that the topics of the workshops would cover household waste and waste water issues. However, in the case of Macedonia an inquiry of the participants of the first Info Day in late 2007 showed that the seminars in their country should rather focus on issues connected with the IPPC Directive, rather than to work on the waste water issue. By then, it was foreseeable that the necessary by-laws related to the water management area would not have been elaborated, while the situation was the opposite for the IPPC directive.

In the case of Croatia, the topical selection was identical to the most crucial issues as had been named in the survey.

Generally speaking, it could be stated that Croatian local and regional authorities are a bit more sceptical and more critical towards their national authorities, as well as to the European Union and their country's accession than their Macedonian counterparts.

This comparative assessment gave the project team a first deeper insight into the situation in Croatia and Macedonia and was a useful document later on that could be forwarded to foreign experts that would participate at seminars but were not yet familiar with the region.

The full target group assessment report

"Knowledge and attitudes towards European integration and EU environmental legislation in local and regional self-government in Croatia and Macedonia" (10/2007)

Is available for download from the website of the Baltic Environmental Forum Germany: www.bef-de.org or the Federal Environment Agency http://www.umweltbundesamt.de/uba-info-medien/mvsnl_medien.nhn?anfrage=Kennnummer&Suchwort=3338

Train-the-trainers programme

The concept of the project was to grow local capacities among environmental experts on EU environmental legislation with a special focus on the needs of local and regional self-government. Therefore, in the first phase of the project four training sessions were organized jointly for participants from Croatia and Macedonia. This phase of the project also received co-financing from the European Commission.



Fig. 1: Participants of the last train-the-trainers session in the Macedonian capital Skopje (November, 2007). | Photo: N. Ježek

The participants of the programme were primarily members of environmental non-governmental organizations from both countries, and the people could be committed to be available also beyond the project course as resource persons for further capacity-building for local authorities. Additional participants came from local authorities. They could better introduce the perspective of this target group and through them it was also possible to ensure that at least one municipality received direct and more extensive capacity building. Pre-requisite for the participation in the courses was a sufficient command of English.

The train-the-trainers programme consisted of two main components; a) knowledge about the foundations and principles of the political system of the European Union, and b) modules that should increase the participants' skills to organize an event and to prepare and hold their own presentations at the future info days and workshops to be organized in the frame of the project. Both components were divided into two parts. It was principally meant that one participant would at least take part in

session I and II of a topic, which in practice was not always possible. It was not obligatory to participate in all four sessions, although of course, appreciated.

The idea, not only to lecture on the EU system and its environmental legislation, but also to include a technical part and presentation training is the result of many years of experience of the Baltic Environmental Forum working in Central and Eastern Europe, and knowing that these topics are underdeveloped as people receive a lot more training on factual matters.

The locations of the train-the-trainers courses were regularly altered, with the first session being held in May, 2007 in Ohrid, in Southern Macedonia, the subsequent two sessions took place back to back in the Croatian capital Zagreb in June, and the last course was organized in Skopje, again in Macedonia in November 2007.

Course: EU Principles I

The aim of the first course was to develop an understanding of the main principles of European Union policy and to make clear the basic functioning of the political system of the EU, mainly explaining the main actors, the law-making, and the decision-taking procedures. The lecturers for these events were two senior environmental experts from the Baltic Environmental Forum Latvia, Ms. Ingrida Brēmere and Ms. Daina Indriksone, which had participated in a similar programme themselves and now passed on their experience and knowledge. They also prepared all the training materials.



The programme of this first session consisted of the following items:

- A complete overview of the historical development of European Integration
- EU environmental policy: goals and principles, covering the historical development of it, the legal basis in the different main treaties
- Institutions involved in the decision-making process: Parliament, Commission, Council, Committees, and lobby groups

- Legislative instruments: Regulations, Directives, Decisions, etc.
- A practical working group on how national legislation is adopted in the target countries
- How new EU legislation is initiated in the EU: procedures and roles of involved institutions
- Co-decision: procedure and actors involved

The trainers had to limit themselves to principal issues and going into deeper detail was not possible, given the short time of one course. As stated by the participants in the evaluation of the course, however, it provided a systematic overview which helped the Croatian and Macedonian participants to continue seeking for more information on their own initiative. The participants were also given a home task which they should complete for the second session.

The second session concerned the development process of different legal acts in the EU. The participants were asked to find answers looking at environmental directives of their choice to the following questions: What is its current status? Which steps of co-decision procedure have been taken and when? Has a public consultation been undertaken and when? What were the main disputes and which were the positions of the opposing parties?

Course: EU Principles II

After having completed the political system of the EU, its structures and main processes, and having explained the main guiding principles of EU environmental legislation, the second course covered different environmental fields and related directives, where the two focus topics, waste management and water management received special attention. Overall, the following areas were addressed and enriched with examples from how transposition looked like in Latvia:



- Introduction to the EU Environmental legislation (main fields, different levels of responsibilities for implementation)
- Waste management: EU policy development, key directives, main tasks and implementation experiences at municipal level in Latvia
- Integrated pollution prevention and control: EU policy development, key directives, main tasks and implementation experiences at municipal level in Latvia
- Air quality: EU policy development, key directives, main tasks and implementation experiences at municipal level in Latvia
- Water management: EU policy development, key directives, main tasks and implementation experiences at municipal level in Latvia
- Nature protection: EU policy development, key directives, main tasks and implementation experiences at municipal level in Latvia
- Process of transposition of environmental acquis in Latvia - challenges and process

Also here, the amount of topics covered was quite extensive and it is recommended that at minimum two full days or even three are considered if such a type of training is carried out again in the future.

Since many of the participants contributed to the workshops for local authorities later in the project, these two sessions provided a good basis to ensure an equal level of knowledge. It helped to clarify open questions and misunderstandings which are naturally occurring, if a country is in the middle of the process of accession to the EU; not to mention that there are even public myths about the EU in the old member states. Therefore, we consider that such a programme is not only interesting for activities in accession countries, but should be repeated regularly

when later addressing specific topics of environmental legislation, given also the speed at which changes in EU legislation occur.

Course: Event organization and presentation

Although the main focus of the train-the-trainers programme was to extend the knowledge about the EU and its environmental legislation to the local trainers, improving the quality of future events was considered as an additional supporting element that would later make the workshops more attractive and useful for the participants.

Lecturer for both sessions was Ms. Heidrun Fammler, President of the Baltic Environmental Forum Group with a long year experience in project management, event organization and chairing, and since many years also providing trainings on these issues to the own staff, as well as externals from other organizations and authorities.

The first course was based on the principle of "How to organize a good event" - yet, it did not primarily tackle purely technical issues of event organization. The motivation was to look at event organization from the content side: how to arrange a logical agenda that lead the event to conclusions, and considering different variants of feasible moderation and chairing. The second priority topic addressed the making of good presentations.



In contrast to the two training courses on EU environmental legislation and policy, the presentation and facilitation courses were not fixed as strictly and gave room to discuss individual challenges of the participants.

The lectures of this session were the following:

- Agenda building: how to logically arrange and connect different sessions of a workshop and how to efficiently use breaks to elaborate interim results or to give spare time for prior working groups.
- Moderation and facilitation: different tools of moderation and facilitation of groups ranging from large audience to small working groups were introduced and examples of their application were discussed – which tool suits which goal of a session.
- Presentation skills: basics of a good presentation and timing in relation to the type of event, target group, and the importance of the own topic within the agenda of an event were presented and discussed
- Stakeholder communication: This topic covered issues of how to properly invite participants, how to successfully invite experts to seminars and how to get a presentation from them which fits to the topic of the event and is attractive for the audience, and issues related to roles and communication inside the event organizing team.

Several practical exercises, reflections, and discussions, were included between the topical blocks. The participants were divided into four smaller groups covering one concrete event from their own projects, which they would organize shortly after the training course. The exercises then were adjusted in relation to these events for each group, which eventually gave the participants hints and tips which they could apply later throughout the whole process of the event organization. In the final evaluation the participants very much appreciated the type of event and particularly the way it was carried out, encouraging them constantly to bring up their own examples and to find explanations and solutions to why something did not work so well in the first place and what should be changed to improve for future occasions.

Course: Presentation and facilitation

The final course in the frame of the train-the-trainers programme was once more devoted to deepening some of the aspects that were dealt with in the previous course on event organization and presentation. This time, the emphasis was put on the participants' skills to moderate and facilitate an agenda and once more on their own behaviour and appearance when having a presentation. In short, the main topics were:



- Chairing an event: Opening, concluding, moderating and mediating
- Facilitation of working groups
- Deepening the use of different facilitation tools - exercising their application with the help of a sample workshop agenda
- Improving presentation performance - how to handle difficult situations: e.g. holding a presentation of a colleague who fell ill on short notice, how to deal with participants that are keen to prove you wrong, how to deal with passivity of the audience, or how to handle difficult discussions that result from what has been presented

To better analyze and reflect on the features, a camera was used during the exercises and the performances of some volunteering participants were recorded.

The original intention was to use this session as a preparation for the next steps, the organization of info days and topical workshops for the local and regional authorities in Croatia and Macedonia.

Again, the participants were divided into small groups and each group was given a sample agenda of a workshop, where the topics of working group items and the tasks were left blank. Each group of training participants had to elaborate a suitable topic and task for these sessions and some of them were played through with the whole group.

In the end, many participants concluded that prior to the course they did not expect that a seminar preparation mean such deep and intensive work, as it was exercised in the training. Even experienced seminar organizers admitted that for them it was a very fresh and attractive approach to come to a workshop or seminar.

The overwhelming appreciation of the courses by the participants lead to a combined content preparation for the workshops on waste and water issues, as well as IPPC with explicit interventions on facilitation topics and

arranging the setting as complex “seminar preparation meeting”.

Info Days

The Info Days were intended to provide general basic information about the European Union and its environmental policies and to point out how EU legislation is made and then reaching local and regional authorities, thus influencing their daily work. Another aim of these half day events was to advertise the topic workshops which would follow at a later point of the project course and inform about the project activities as such. Five of these info days were planned in each country and in order to achieve a country-wide outreach, different locations should have been chosen, ideally in a regional centre which was easily reachable from neighbouring countries or municipalities.

The events were organized by the local project partners utilizing the knowledge and skills acquired during the train-the-trainers programme. Additionally, the national Ministries of Environment or other related ministries provided speakers to give an overview of the current developments in national legislation and where possible, the trainers and experts from Latvia, and experts from German or Latvian municipalities participated and shared their experiences with their colleagues.

The actual circumstances lead to some modification of the original plan and separate approaches were taken for Croatia and Macedonia.

Croatia

In Croatia, more or less the original plan was kept, the Info Days were organized throughout the whole remaining project course, altering the provided information based on recent activities.

The locations chosen for the Info Days were the capital and largest city Zagreb, in the Northern centre of the country, where the first event took place in December 2007. The next Info Day was organized in Varaždin (February 2008), which is a city of about 41,000 inhabitants near the Hungarian border. A month later, in March 2008, the third Info Day was hosted by the city of Osijek, in the Eastern Croatian region of Slavonia. The city has over 110,000 inhabitants and is the urban centre of the country's East. The remaining two Info Days were organized on the Adriatic coast (February and July 2009). One in Istria, in city of Pula (62,000 people) on the central

The end of this course also marked the end of the core train-the-trainers programme and it was time to put the new skills of the participants to a real test.

coast and the last event in Zadar, the centre of the Northern Dalmatian region with around 91,000 inhabitants.



Depending on the location, the amount of participants that the Info Days in Croatia could attract ranged from 20-40 people.

The agenda of the first Info Day in Zagreb contained the following topics:

- EU development and structure
- EU water and waste frameworks and implementation at municipal levels
- Practical examples of EU legislation from the Latvian town of Cēsis.
- The waste management framework in Croatia
- Practical examples of implementation of EU waste management legislation in the City of Zagreb

At this first event, the first two topics were presented by the Latvian experts which also lead the two courses on EU principles, Ingrida Brēmere and Daina Indriksone. Ms Inta Adamsons from Cēsis, a city with around 19,000 inhabitants located in North Western Latvia was additionally participating, and presenting the city's experiences during the accession period.



Fig. 2: Final Croatian Info Day on the foundations and principles of the European Union and its environmental policies, Pula in July 2009 | Photo: Ž. Medven

Macedonia

The first Macedonian Info Day was organized at the end of December 2007. By then, a series of similar events had been carried out throughout the country and the need and demand to lecture on how the EU is working and how its legislation is developed had been satisfied by them sufficiently. In consequence, the Info Days were attached to the later topic seminars with the aim to provide more basic information and an overview, however it was more specifically connected with either of the topics, waste management and IPPC. Still, it was an opportunity to offer those who could not participate in a whole two-day seminar to get a quick overview of the topic or in some cases it was possible to convince people to stay for the whole seminar who would have only attended the Info Day in the first place. For those participants who attended also the seminar it was an opportunity to recall basic information and it ensured that in the following two days everyone had an equal background knowledge to follow and contribute to the proceedings.

Given, the relatively shorter distances in Macedonia, the location was not as important to cover many different municipalities and being divided only into 89 local administrative units allowed for organizing smaller events compared to Croatia.

Two info days, those connected to the waste seminars, were held in the Southern resort of Ohrid (56,000 inhabitants) in October 2008 and January 2009. The remaining two Info Days, which were held at the opening of the IPPC seminars, were organized in the capital Skopje (560,000 inhabitants) in December 2008, which itself actually consists of ten municipalities, and finally in the Pelister National Park in the South of the country, next to the

country's third city, Bitola, with 95,000 citizens. This last Info Day took place in May 2009.



The following structure was the basis for the contents of the Macedonian Info Days:

- Introduction to the historic developments of the European Union, however, kept briefer than for the Croatian events.
- Introduction to the principles and areas of the EU environmental acquis, while emphasizing those areas which were of relevance for the subsequent workshops.

Each info day was attended by approximately 20-30 people. Generally, having the info day back-to-back with the seminar was useful to get people into the seminar discussions more quickly. First questions arose during the presentation of the overview, however they were mostly collected and brought up again during the respective session on the following days.

Seminar preparation workshops

In order to have a well structured concept for the seminars, designed for the local and regional authorities in both countries, a preparation workshop was organized in which the project experts from BEF Latvia, and the core persons, which were responsible for organizing the seminars in the target countries met for an intensive conceptual planning meeting.

Objectives of the meeting were to get further training on the topics for the local teams, to recall a few general principles of event organization from the train-the-trainers programme in the first stage of the project, and mainly to develop the content for the two up-coming workshops. Each preparation workshop was initiated with homework, which was developed by the Latvian experts addressed to the Croatian and Macedonian teams. The purpose was to get as much information as possible on specific questions related to water management, waste management, and industrial pollution (IPPC) in the two countries. The information to be collected ranged from pure statistical data on e.g. the amount of IPPC installations (Macedonia) up to basic information on waste streams or the division of responsibilities in the field of water management in Croatia. Moreover, the purpose was to get an up-to-date picture of the target groups' needs.



Fig. 3: Croatian, Latvian, and German experts discussing the preparation of the focus workshops in Hamburg, April, 2008.

Again, the approaches were different for Croatia and Macedonia. In the Croatian case, it was possible to gather the Croatian partners in Hamburg, Germany, in which additionally a few municipal representatives took part. The event took place from 9-11 April, 2008.

The participation of practitioners from local authorities was considered as very valuable as it brought the view of the target group directly into the preparation phase of the seminars.

The agenda of the Seminar preparation workshop for Croatia contained the following items and was arranged analogous for each topic, waste and water. For each topic approximately one and a half day were allocated:

- Needs of the target group
- Water Management system / Waste management system: a comparison between EU, Latvia, and Croatia based on the information provided through homeworks
- Structuring the agenda of the workshop
- Defining the content of the presentations: developing questions for speakers
- Designing tasks for working group sessions
- Finalizing the draft agenda
- Developing an outline of the publication

For Macedonia, the event was shortened to two days, resulting from the experience of the Croatian workshop and it was held during 17-18 June, 2008 in Skopje.

In conclusion, although such comprehensive preparation workshops were not intended initially, eventually it was possible to achieve a smooth transition shifting the responsibilities from the trainers to the trained experts.

Workshops in Croatia

First Water Management Workshop

The very first topical workshop of this project was carried out from 3-4 June, 2008, in Croatia, outside the town of Šibenik, on the Dalmatian coast and introduced to the issue of water management. Apart from the project staff, other foreign speakers were Dr. Friedrich Reinhold of the Environment department of the municipality of Krefeld, and Dr. Stefan von Keitz (Resident Twinning Advisor).



The following topics were presented and discussed during the meeting

Introductory session

- An overview of the European water legislation and its role for local authorities
- An overview of the national legislation in Croatia

Session I: Water Framework Directive (WFD)

- Transboundary co-operation between Germany and the Netherlands
- Cooperation among stakeholders in water management planning, presenting an example from Latvia
- Preparation of the implementation of the Water Framework Directive in Croatia
- The WFD Twinning project: Benefiting from German experience
- Working group on understanding the current system of cooperation and proposing changes for redistribution of responsibilities

Session II: Drinking Water Directive (DWD)

- Introduction to the directive and a comparative overview on the present situation in EU
- Share of competencies and responsibilities for implementation in Croatia
- Water quality and quantity: Its availability and usage in Croatia

Session III: Urban Waste Water Directive (UWWD)

- Introduction to the directive
- Options for selecting waste water treatment methods
- Implementation of the Directive in Latvian municipalities: financing strategies and criteria for selection of projects
- Working groups on setting fees/tariffs and strategies for communication between water companies/municipalities and inhabitants
- Rain water management and urban sewage systems

The main conclusions were that the communication between the national competent authorities, i.e. particularly the national water management authority, Croatian Waters (Hrvatske Vode) was insufficient and needed improvement. Further, it was stated that more education of municipal staff is needed in the field of water management (technical issues and legislation issues) and it was concluded, that local and regional self-government units require more information about financing opportunities for investment in the field of urban waste water management.



Fig. 4: Working group at the first Croatian workshop on EU legislation and water management in Šibenik in June, 2008.

Second Water management workshop

The second workshop for water management was held back to back with the first waste management workshop, 16-17 October, 2008.



The seminar was attended by most participants that attended the first part on the same topic (held in June, in Šibenik), plus some additional ones: representatives of local and regional authorities, utility companies and state administration offices in counties which are in charge of water management issues, as well as representatives of the Ministry of Regional Development, Forestry and Water Management (MRDFWM), Croatian Waters, and foreign lecturers and guests from Krefeld Municipality, Germany, BEF Latvia and BEF Germany.

Objectives of this seminar were:

- To further inform representatives of LRAs, utility companies and water inspectorates on the details of most relevant EU water legislation, from the point of view of local/regional implementation
- To present best practice examples from several EU member states, specifically on issues brought up in the first part of the seminar in June
- To present the newly adopted Water Management Strategy of Croatia (August 2008) and obligations arising from it for the local and regional level
- To further motivate discussions about problems and possible solutions in water management

The seminar agenda contained the following sessions:

- Session I: Development of the water infrastructure networks (needs, legal basis for the land

ownership – network of landowners. Legal procedure for expansion of the network

- Session II: Development of public drinking water supply system
- Working groups: Efficient access to funds available for water management on local level (level of the preparedness in local authorities, opportunities available, scenarios in reaching optimum)
- Session III: Permitting of water pollution by small water polluters (many small polluters – significant impact)
- Working groups: access to information on permits and on self-monitoring data: Cooperation aspects between permitting authorities and municipalities - case studies
- Site visit: Biological wastewater treatment methods. Constructed wetlands
- Session IV: Inspection on water management (daily supervision and cooperation between inspectorate and municipality)
- Working group: Case study - Emergency planning for accidents with water-related impacts, proposals for improvements in practice

Hence, the consolidated conclusions and recommendations from both seminars are presented, endorsed by the participants:



Fig. 5: Latvian expert, Kristina Veidemann, giving an interview to the local division of the national Croatian television, HRT during the second workshop on water management in Krk, October, 2009.

River Basin Management Plans

- intensify regular communication between national authorities (Croatian Waters, Ministry of Regional Development, Forestry and Water Management) and LRAs in general regarding water management issues
- regular informing of LRAs in development/adoption procedures for RBMPs and rele-

vant regulations – public discussions, public hearings, media (internet etc.)

- transparency and integration of all relevant water management data and issues

Formulating and communicating water prices

- permanent informing of the public about price structure and purpose of water service revenues, in order to realise the necessity of investments and justifiability of transformation from social-oriented to economy-oriented prices
- separation of water supply/wastewater discharge from other municipal utility services (note: anticipated already in the Water Management Strategy)

Technology and water infrastructure financing

- more transparent criteria of allocation of financing for water infrastructure, in order to have a more balanced resource base among LRAs
- reducing the number of water utility companies for easier work and cost coverage (note: anticipated already in the Water Management Strategy)
- not insist on most expensive technologies, or quick final solutions
- use already developed technologies, suited to the specific needs (primary, secondary or tertiary treatment) and financial capacities

Education / capacity building

- education of local authority staff on technical water management issues
- education on financing sources, and for preparation of investment projects for IPA and other funds (with assistance of IPA project development unit established at the Croatian Waters)
- training of operators for new WWTPs
- solving the problem of fragmentation of authority for water management
- consider establishment of water inspection at regional/county level, instead of the national level inspection
- specialised trainings for water inspectors, in particular on EU minimum criteria for water pollution inspection and monitoring

The overall evaluation by the participations of the seminar was very positive, more than two thirds stated that the seminar had delivered answers to open questions and

increased their knowledge on the topics covered in both seminars.

Next steps

The consolidated recommendations from both seminars will be submitted by the REC - as one of the concrete results of the seminar - to the competent national authorities - MRDFWM, Croatian Waters, MEPPPC (?), and other identified stakeholders as relevant by the seminar participants, for consideration and as motivation for further discussions. Having in mind that this seminar has been organised with the purpose of education, the REC Croatia has no mandate to use this event to influence the changes in the Croatian water policy; however, communicating these recommendations could also contribute to improvement of the situation. They were also included in the final information manual on implementation of EU water management legislation intended for LRAs, water utility companies and county water inspection that was prepared and will be widely distributed.

First waste management seminar

The first waste management workshop in Croatia was held on the island of Krk on 14-15 October, 2008. The seminar was attended by roughly over 50 participants from municipalities, regional authorities and national ministries.



The main objectives of the seminar were:

- representatives of regional and local self-government units, as well as several communal companies about most important EU regulations related to waste management and implementation aspects at local and regional level
- present the status of transposition of EU regulation to Croatia and current praxis
- initiate the discussion about problems and solutions in waste management

The topics covered were the following:

- Legislative framework (EU and national)
- Landfilling and closure of illegal dump sites
- Study visit to the local separate waste collection yard
- Aspects of waste management systems
- Waste management and public interests
- Financing waste management for municipalities

The first, introductory session to components of the waste management was chaired by Mr. Aleksandar Rajilić, Head of Waste Management Department, Ministry of Environmental protection, Physical Planning and Construction.

Ingrida Bremere, *BEF-Latvia*, gave the review of EU waste management policy and roles of local governments

in the process, and reinforced the lecture with practical examples. Aleksandar Rajilić, MZOPUG, Hrvatska, presented the national waste management policy, legislative framework and implementation system in Croatia.

After the lectures, the participants discussed about the differences in responsibilities and operations of local authorities in waste management through the following challenges:

- in praxis, there is no sanction for the local government units (LGUs) that do not comply with national legislation
- it is not clear if old rule books are automatically outdated through the newly issued Waste Act
- illegal dumpsites on the territory of Croatia should be transferred to local authorities in order to establish responsibility for them
- there is a lot of overlapping concessions for secondary raw materials while it would be more simple for communal company in charge of communal waste to collect it
- green islands are not protected against waste pickers
- independent environmental departments on a regional (county) level improved the status of the counties in the waste management system
- according to the Law, by the end of the year the locations of recycling yards as well as collection points for construction waste should be identified; the question is whether the physical-planning documents should be changed as well
- Ordinance on Environmental Impact Assessment has time constraints that cannot be obeyed within the deadline for establishment of recycling yards
- According to the relevant rulebook, LGUs should develop landfill remediation plans and they need the guidelines for this task

The second part of the morning session was chaired by Mr. Roland Gajšak - Town of Samobor, and included two lectures: Ms. Kristine Veidemane, BEF-Latvia about the Regulatory measures/rules on a local level: experience from Latvia, and Mr. Ivan Lončarić, Town Zagreb, presented the experience of the City of Zagreb through practical examples of long-term agreements btw. relevant authorities when finding the locations for water management facilities, and establishing recycling yards.

Ivana Vojnić-Rogić, Town Zagreb, introduced the participants to working groups session where they had to

propose the improvements in the tariff system, frequency of waste collection, and ways of collection for recycling materials.

Mr. Saša Avirović, GKP Čakom d.o.o. presented the results of WG I.

- unless communal fines are introduced, the change of tariffs to volume/mass is not possible
- all estate properties should pay water management services,
- frequency of waste transport should be - 1 bin of 120 l - once a week,
- separate collection of waste for recycling,
- recycling yards (one per 10.000 inhabitants) and no-costs transport of recyclables from household
- price structure - fixed for bin price, and variable for transport,
- additional pre-paid bin available
- public education is a must,
- town budget for WM is important issue

Mr. Robert Briški, Town Varaždin presented the results of WG II, explaining the best practice of Varaždin.

- decision on water management system accepted in 2002. and obliges every user to participate (private business, non-profit organisations, etc.) through the signed agreement with communal company
- green islands do not exist, but bins for mixed communal and separately selected waste
- waste mass has decreased 40%, bills are paid up to 98%
- tariff includes fixed amount for transport and variable amount according to the number of persons in the household
- transport plan is developed according to the density of inhabitants
- every households receives the leaflet with timeline

Results of WG III presented Mr. Milan Kamenko, Town Osijek.

- winning formula is **waste = money = incentive or fine**
- tariff system according to living area has to be replaced by amount of waste or number of persons in the household
- tariff has to include fixed amount for overhead costs

- waste should be collected once a week
- additional bins/bags should be provided in case of excess waste amounts
- one green island to be provided for every 1.500 citizens
- recycling yards to be provided for every 25-30.000 citizens

After the WG presentations, Mr. Mark Lindert, Düsseldorf, Germany presented examples of the local regulations and decisions in Germany. The average annual price of communal services in Germany is 120-130 EUR/person, if separate waste collection is paid, then it is 200 EUR/person. In discussion participants also expressed big differences in waste transport schemes, e.g. Varaždin collects waste once in a week, while in dubrovnik waste is collected every day (for every household), and once in a week for construction waste.

The event continued with the second session on Landfilling and closure of dumpsites, in which 2 presentations: by Mr. Armands Nikolajevs, Association of Communal Companies, Latvia about Latvian experiences in closure of dumpsites, and by Ms. Ivana Dukši, Varaždinska county, about challenges and results of remediation of landfills in Varaždin county.

The first seminar day was completed with the site visit to location of the separate waste collection, Ponikve, Krk. Mr. Frane Mrakovčić, Director of Ponikve d.o.o. communal company presented the results of separate waste collection on Krk island.

Session III. - WASTE MANAGEMENT ASPECTS was chaired by Mr. Marijan Marunica, Communal company, Samobor.

Ingrida Bremere, BEF-Latvia presented separate waste collection schemes in Latvia, followed by the presentation of Mr. Armands Nikolajevs about waste management investments and operational costs for established system. Discussion was raised around the question about the way locations for regional waste management centers in Latvia were identified.

Mr. Mark Lindert from Düsseldorf emphasized high efficiency of water management system in the town, where 2,5-3% budget is spent for these services, and water management fees cover only real costs. The largest costs are for bins/containers that are assigned according to the number of persons/type of waste collected separately, and landfilling accounts for up to 40% of total

costs. Electronic waste is collected by one communal company, which is different to Croatia.

Mr. Marijan Marunica, informed participants about the status of waste management system in Samobor..

Session V. - WASTE MANAGEMENT AND PUBLIC INTERESTS was chaired by Mr. Saša Avirović, ČAKOM communal company, Čakovec. Three presentations, by Ms. Kristina Veidemane, BEF-Latvia, Mark Lindert and Armands Nikolajevs presented the need to inform citizens timely and clearly on their waste management obligations, and also on costs of the system. Communication strategies and public awareness raising tools were also presented.

According to the workplan working groups (WG) were formed in order to develop:

1. Strategy for informing the public on fees and tariffs,
2. Communication strategy with public on location on waste management facilities

Results of WG I presented by Mr. Saša Avirović have the following main points for information strategy about fees and tariffs:

- involved relevant authorities
 - ✓ administrative depts. of towns and counties
 - ✓ prefects and mayors
 - ✓ institutions like Ministries, Fund, companies or public institutions that operate the waste management centers
 - ✓ PR office/dept
- target groups
 - ✓ local community
 - ✓ NGOs
 - ✓ county chambers of commerce
 - ✓ consumer associations
- information to be provided to target groups
 - ✓ present as much "bad" data on current situation
 - ✓ present the benefits of new waste management concept
 - ✓ compare individual solutions for town to regional solutions for association of towns/municipalities
 - ✓ transport costs equally divided regardless of differences in prices
 - ✓ explain the raise of real estate prices in the vicinity of RWMC (Regional Waste management Centre)

- ✓ closure of old dumpsite that present threat to environment and health
- ✓ high price is justified by better treatment of waste
- communication tools
 - ✓ free info-phone line
 - ✓ electronic and published brochures
 - ✓ seminars, public discussions
- timeline
 - ✓ start informing immediately
 - ✓ information follow the realization of project
 - ✓ information is concrete and justified
- expected results
 - ✓ public accepts the raising of waste management fees (up to 95%)

Working group II commented that in every phase of the following phase of establishment of RWMC:

- choice of location
- verification of location by physical plan
- EIA
- location permit
- implementation

there is a need for public information. The following points were presented by Ms. Vjeruška Stanišić:

- positive arguments for the location
 - ✓ extension of the existing location equals extension of the infrastructure
 - ✓ new jobs opening
- negative arguments
 - ✓ old part of the landfill affects the inhabitants
- target groups
 - ✓ local authorities
 - ✓ NGOs and institutions, especially those in 10km around the future RWMC
- communication tools
 - ✓ contact radio shows
 - ✓ public discussions
 - ✓ leaflets combined with bills

Session V. - FINANCING WASTE MANAGEMENT FOR MUNICIPALITIES was chaired by Ms. Amalija Ikšić, Environmental and Energy Efficiency Fund, which is also a co-financing the activities of the project " From Latvia to Croatia and Macedonia: Capacity building for implementation of EU environmental policy on local and regional level" in Croatia.

Ms. Kristina Veidemane, informed about the challenges on financing waste management projects in Latvia either with national, or EU funds. Mr. Predrag Čuljak, EPEEF presented the up-to-date statistics about the financing awarded in Croatia for remediation of landfills, and also announced 130 mil EUR to be invested in RWMC in Croatia until 2015.

After the final questions and discussion, Ms. Željka Medven summarized the seminar, presented follow-up steps and closed the seminar.

In conclusion it can be stated, that the waste management sector is very well developed in Croatia, which was very visible for example from the site visit. Although this must be seen also as a best practice example for Croatian standards, the German expert Mr. Lindert stated that it is a solid installation, state of the art without any sophisticated equipment and thus easily replicable in the rest of the country. As usual, the main obstacle brought forward

by some of the participants is the lack of financial resources and information on funding opportunities and how to make use of them in order to make further investments.



Fig. 6: Participants of the first waste management workshop during the visit of the local waste management and recycling company on Krk, October 2008.

Second waste management seminar

The second seminar on the waste topic for representatives of self-government units acting on local and regional level within environmental framework was organized in Zagreb by REC Croatia and Baltic Environmental Forum (BEF) in Zagreb. 46 representatives of regional and local self-government units, as well as several communal companies and relevant authorities: Ministry of Environmental Protection, Physical Planning and Construction - MoEPPPC, Environmental and Energy Efficiency Fund - EPEEF as well as foreign speakers from City of Düsseldorf, Germany, and Latvia.



Objectives of the seminar:

- educate regional and local self-government units, as well as several communal companies about most important EU regulations related to waste management of specific kinds of waste and implementation aspects at local and regional level
- present the status of transposition of EU regulation to Croatia and current practice, also related to special kinds of waste
- initiate the discussion about problems and solutions in waste management

The 2-day event was divided in three sessions that were chaired by different representatives of relevant institutions and organizations. The first session was dedicated to management of recyclable waste, and examples of transposition in EU and Latvia were presented by Ms. Kristina Veidemane, BEF Latvia and the situation in Croatia by Mr. Aleksandar Rajilic, Head of Waste Management Department, Ministry of Environmental Protection, Physical Planning and Construction. Ms. Veidemane also presented the specifics of collection of construction and electronic waste in Latvia, and Mr. Mark Lindert, City of Düsseldorf, Germany gave a critical review of the collection of industrial waste in Germany.

After introduction to working groups, participants were divided into three groups that had the task to elaborate

on challenges and solutions in recyclable waste management

- Situation with recycling yards for construction waste: the deadlines for establishment not realistic and more time will be needed.
- the location for recycling yard needs a usage permit, and the Waste Act proposes the location in commercial zone or if not existing to be identified in the physical plans of municipalities and towns
- establishment of Croatian norms (HRN) about the reuse of construction waste
- Can the operators of construction yard be granted a concession?

Recommendations:

- ensure the transition period for establishment of recycling yards for construction waste
- the Ministry should issue the guidelines for the related activities of management bodies in counties

Problems and recommendations for packaging waste were the following:

- the concessions for collection should be granted by the county, and if not relevant, then by the Ministry
- the scope of collection: amounts less than 0.2 l and other plastic and multilayer packaging waste
- the relevant stakeholders that must be involved in the whole process concerning packaging waste are: owners (shops), collectors (communal companies), centers for management of construction waste which is probably a new stakeholder in the process, and recovery companies
- system efficiency: communal companies can take over the role of centers and recycling yards have to control, count, sort according to colours, press and transport packaging to recycling companies
- accompanying lists should be electronic, not in paper

The results of the working group discussion on electric and electronic waste were:

- The Waste Act prescribes how the management of different kinds of waste is performed: permit for the management of hazardous waste is issued by the state, permit for the management of inert non-hazardous waste is issued by the county, and concession for the WEEE (Waste from Elec-

tric and Electronical Equipment) Directive is issued by the state or county and there is lack of communication between two levels.

- Problems of communal companies are: WEEE that stems from the communal waste until now is illegally collected by communal companies, there is no right compensation for the communal companies, there is no communication between the concessionaire and communal companies, no widespread organized collection through recycling yards, no fines for those who deposit WEEE mixed with communal waste, leaving the waste on the street is not the right way to collect bulky waste (including WEEE), citizens do not have compensation for WEEE

Recommendations

- Improve the communication between the Ministry, county and local authorities during:
- issuing of permits for management of WEEE
- issuing of concessions for management of WEEE
- improve the legislation
- establish the system of recycling yards (obligation of local governments)
- The Croatian Environmental Protection and Energy Efficiency Fund (EPEEF) must introduce incentives for waste owners (modeled according to the packaging waste)
- communal inspection service must have bigger competencies in order to be more efficient
- improve the activities of the concessionaire by improving their contractual obligations
- educate the citizens is the obligation of all included stakeholders

The session was concluded with the presentation of Mr. Mark Lindert on management of special kind of waste (especially hazardous waste).

The second session included two lectures: Ms. Kristine Veidemane, BEF-Latvia about the experience from Latvian municipalities on remediation of illegal landfills, and Mr. Mark Lindert about the illegal waste disposal in Germany: how to identify and penalize violators.

Session III on establishing county/regional centres for waste management included the lectures from Latvia about the selection of location for waste facilities, Mr. Nedo Cepić on development of RWMC in North-west Croatia, mechanical-biological treatment of waste by Mr. Danko Fundurulja, IPZ Uniprojekt and Mark Lindert, Germany, as well as transport of waste to RWMCs in

Croatia, and ways to calculate prices (Mr. Alen Ćurin, Čistoća, Split).



Fig. 7: Waste management facility in Croatia

Discussion involved the following issues:

- NGO representative commented that feasibility studies for the 3 new Waste Management Centres in Croatia were developed by Danish companies that have different conditions in own country (soil, underground water, seismology), and the capacities of the Center are too big, not taking into account selective collection of waste; however, argument was provided that Center capacity is adapted to separate collection of waste and increased number of people
- best example of selection of landfill site is emphasized in Međimurska county, where the new landfill is based on a remediated one, and the citizens are sensitized; similar approach can be used when selecting locations for transfer stations
- transport of waste from islands will not cause traffic collapse, e.g. in Split, shipping company Zadar was selected, and transport will be separate for waste freight, and separate for people
- in Croatia the selection of the landfill is based first on preliminary EIA for several locations, and then on detailed EIA for one location
- From Jan. 1, 2010. communal companies in Croatia should introduce the payment of communal services according to waste quantities - which means according to volume, mass or number of people in households, and that will, contrary to expectations cause increase of the prices
- northern part of Croatia (Varaždinska, Međimurska county) has big percentage of fees paid by citizens, and introduction of obligatory lump-sum payment is introduced irrespectively if the owner of the estate is living in the house
- efficient fines should be introduced for non-payment of communal services and reduce the non-payment, and reduce the deadline for fines accordingly
- the limit for feasibility of transport without transfer station is 50 km, but cost-benefit analysis should be done for each situation separately
- during negotiation process in Brussel there was a question on the structure of fee (what does the user of services pay?), and there are some good examples from Croatia (Zadar, Split) on informing the citizens about this on communal companies web sites
- primary selection in Split is at the moment limited for financial reasons (5.000 Kn needed for each container), and there is a lot of complaints on the specified container locations'
- without incineration/cement plant it doesn't pay off to produce refuse derived fuel (RDF) (it needs energy to produce it, and afterwards it must still be disposed off), and generally incineration in cement plant is cheaper than in incineration plant but cement plants must satisfy the criteria for emission in the environment
- interesting example of public-private partnership is mentioned for north-west Croatia where CO-WI developed DBO (design-build-operate) model so as to avoid the linkage of public money (eventual EU grant) to private one, because EU does not allow that and there are already indications that private companies do not show big interest in investment
- who will finance the difference between the total amount of WM system in Croatia (3.25 bill EUR) and available EU grants (50 mil EUR)
- the efficiency of usage the landfill methane (8% emission) must be taken into account
- if there is no tax on waste landfilling, the landfilling is still the best option, and the tax on landfilling can be introduced if there is another option of waste treatment
- Local self-governments have the rights to get 30% of the price per tonne of landfilled waste, but it would be much better to decide a fixed amount as is the case with non-hazardous technological waste (currently 12 kn/t)
- company EKO Matulji crushes mattresses, and removes the metal component

- for Zagreb Central WWTP there is a problem with depositing the sludge, because of lacking agricultural areas that would use it or incineration plants
- percentage of recycling will greatly differ depending on the basic figures - 60,000 t of collected glass and plastics (from Environmental Protection and Energy Efficiency Fund) and 37,000 t metal (mainly collected by scavengers at landfills) – which would mean a recycling rate of 33%, what is not realistic % for Croatia

The last presentation on the status and challenges in establishing WMCs was given by g. Aleksandar Rajilić, MoEPPPC. The transition period is expected for Landfill Directive (until 2018), and in program period IPA 2007-2009 two applications (Mariščina and Kaštijun) will be granted EU grants, confirmed the EPEEEF representative, Mr. Predrag Čuljak.

The next steps and activities in the field of waste management are the following:

- Present the draft of these minutes to seminar participants for the comments, and send the final version to the relevant authorities MoEPPPC,

EPEEF, etc. to serve as recommendations and future discussions.

- These recommendations will be included in information guideline for topics relevant to regulation implementation in waste sector aimed at seminar participants - local and regional authorities and communal companies.
- Information guidelines (one for waste, another for water sector) will be provided to seminar participant until end of project.



Fig. 8: Participants of the second waste management workshop in Zagreb, April 2009.

Seminars in Macedonia

First waste management workshop

The Waste events in Macedonia were combined the project “The Priority Environmental Investment Programme for South Eastern Europe – PEIP”, managed by the Regional Environmental Center Headquarter in Szentendre, Hungary. A subsection to the project was devoted to investment strategies in the waste management sector and thus several aspects could be combined here: The PEIP project supplied the Investment component, which has not been a focus to that extent in our project, while the BEF experts, the German expert and the Latvian practitioner could bring in more practical solutions or show possibilities of how to use the financial instruments, which had not been a part of the other project, at least not to the extent as we could provide it jointly. The event was carried out on 28 and 29 October, 2008 in Ohrid Macedonia.



The topics in detail were the following:

Session I: Strategic and Legal framework for the waste Sector. Investment needs and priorities.

- EU strategic and legal framework in the waste sector. EU principles of integrated waste management.
- National strategic, legal and institutional framework in the waste sector. Current situation in the waste management sector.
- Overview of investment priorities and financing needs in the waste sector. National Environmental Investment Strategy (waste part).
- Priority waste projects on the PEIP list: status and the way forward

Discussion:

- EU strategic and legal framework
- Macedonian strategic and legal framework
- Macedonian investment priorities

Session II: International Experience. Regional Cooperation

- Possible models for cooperation among municipalities. Examples from Latvia, Estonia, Lithuania.
- Practical example of setting up the regional waste management system. The Latvian experience.
- Examples from Macedonian municipalities on first experiences in setting up of a regional cooperation.
- Working groups: setting up the best possible model for regional cooperation in Macedonia
- System of waste management in Germany - turning waste into benefit (separate collection, recycling, reuse) - outlook for future
- Communication of new waste management approach to the public

Session III: Waste Management Plans

- Requirements of waste management plans
- Waste management plans in Macedonia
- Elaboration of waste management plans. The Latvian Experience.
- Working groups: Drafting a good waste management plan: Involvement; Resources; Communication with public.

Session IV: Financing investments in the waste sector

- Possibilities for attracting international funding sources. Financing options.
- Full cost recovery. Setting fees and real costs for waste management. The Latvian and the German experience.
- Reform of the waste management companies in response to EU requirements.
- Discussion on financing options



Fig. 9: First waste management workshop in Macedonia, Ohrid, November, 2008.

Second waste management workshop

The second national workshop on waste management in Macedonia was focussing on Developing Environmental Infrastructure Projects. It was held again in Ohrid from 29-30 January, 2009. The main objective of the workshop was to highlight the importance of establishing regional integrated waste management systems, and initiating regional cooperation among the local authorities.

The contents and the discussions in the plenary of this seminar were:

Session I: Strategic and Legal framework for the Waste Sector. Investment needs and priorities

- EU strategic and legal framework in the waste sector. EU principles of integrated waste management:

Mrs. Kristina Veidemane (BEF Latvia) was talking about the EU Legal framework in the field of Waste (Directives' requirements; the way of Directives' implementation; the phases of the waste management – waste generation, selection, separate collection, transport, treatment, recovery and landfilling of waste etc.).

Discussion:

The audience was interested on how the Latvian Government is setting the targets for decreasing the amounts of the bio-degradable waste generated, due to the ban for its landfilling. It was answered that Latvia as an EU member state should comply with all the targets prescribed within the EU legislation, but the truth is those targets are overestimated and it's hard to be achieved, due to specific requirements for managing the bio-degradable waste. There is evidence that they do not succeed to fulfill them, but they work hard to promote both, the composting and production of bio-gas in the anaerobic digesters.

- National strategic, legal and institutional framework in the waste sector. Current situation in the waste management sector

Mrs. Lence Kjurcieva, the representative of the Legal Affairs Department (MoEPP) gave an introduction to the main strategic, plan and legal documents with respect to Waste (the full list of documents is available on the website of the Ministry). All these documentation is prepared in line with the EU requirements in the field of waste management and focusing on the need for local-self government units' development (capacity building; upgrad-

ing of the performances of public communal enterprises and so on.)

Discussion:

It was asked by one of the participants, how justified it is to transpose the whole legislation into the national one; are we ready (financially) to implement all this legislation in real?

The answer to this was that we all know what should be done (and how to be done), but we are still lagging behind. The main reason for this situation is: we do not like to take responsibilities and to face the new requirements; we are not setting targets/objectives to be fulfilled in a measurable manner; it seems much easier to leave the situation as it is, without making any changes etc.

It was concluded that for sure, the regional concept is the most feasible one and the best possible solution to be developed for getting economic, social and environmental benefits.

- Overview of investment priorities and financing needs in the waste sector. National Environmental Investment Strategy (waste part)

In the following, the main findings of the National Environmental Investment Strategy – NEIS (Waste part) were presented. Taking in consideration the investigations carried out for the purpose of this document, it was emphasized by the presenter Mrs. Ana Petrovska that there is no municipality in RM, which is performing analyses in order to identify the own financial needs for capital investments in the waste management (WM). It is not enough just to identify the needs within one municipality. One must also recognize what is the priority level of the need in comparison to other municipalities' needs. In addition, it was stated that none of the 8 statistical regions¹ in Macedonia is prioritized, but each of those regions is starting with equal chances to be granted IPA funds, only if some requirement/criteria (useful to initiate both, the regions to be registered as a legal units and cooperation between the municipalities, for the purpose of good WM) are met. For municipalities, in order to start their own planning and project documentation developing, trained Quality Management (QM) teams need to be established as a bond between donors and municipalities.

¹ These regions merely exist for statistical purposes. They are currently in no way formal administrative levels in Macedonia or in some other way institutionalized.

Discussion:

- There was a comment by one of the participants: “The municipalities are visionary oriented, but the Government is lagging behind”.
- An example was given on how to identify the priority project: it is important that the project solves a huge problem which is of concern to the inhabitants; to provide at least 80-90 % of the customers to pay for the service; rising of the price for service (costs for operation and maintenance) is expected etc.
- The representative of Tetovo Municipality stated that Polog Region has started the procedure for registering od customers and a strategic plan for further action is adopted.
- The criteria/requirements to be prescribed within a Rulebook
- Municipalities complain that they are not able to get the available funds, but the truth is, they are not gaining money because they don't comply with the investing priorities and requirements.
- Getting the available funds is a kind of competition and the most prepared municipalities should fulfill the required criteria.
- Pre-requisite for the sake of municipalities' cooperation is the signed Agreement for cooperation.
- The consultant services on the market will be regulated through hiring consultants/engineers preferably certified with FIDIC (International Federation of Consulting Engineers) license.



Fig. 10: Participants of the second workshop on waste management in Macedonia, Ohrid, January 2009.

Session II: International Experience. Regional Cooperation

- In the following, the audience was introduced to: Possible models for cooperation among municipalities. Examples from Latvia, Estonia, Lithuania / Practical example on setting up the regional waste management system. The Latvian experience (Mr. Armands Nikolajevs and Mrs. Kristina Veidemane)

Discussion:

- The participants were interested in the tendering of the WM services (waste collection → transport → landfilling). There was a case in Latvia where a foreign company won on a tender, because they offered the lowest price for the performed services and they accepted the possible risk that might occur, due to low number of citizens who asked for the services.
- They allocate for awareness rising (public campaigns) 3 % of the investments dedicated for implementation of each project, in order to promote some specific issues related to WM.

Examples from Macedonian municipalities on first experiences in setting up of a regional cooperation:

Mr. Goce Serafimov, representative of Municipality of Kocani (Central-East Region) shared with the audience his own view upon the significance of having the FS? for regional integrated waste management system (Central-East Region). He favored the regionalization, emphasizing the economical and environmental justification of such a system. He pointed out that many responsibilities for the municipalities derive with the regionalization of the WM practices, but it depends on their willingness to take some challenges. A good point was emphasized by him – it is of huge importance to include the concerned public at the very first stage of the process of project planning.

Discussion:

- The Regions are getting established for the sake of the WM practices optimization.
- The site selection process is required to fulfill the environmental criteria (distance from populated area; hydro-geological conditions etc.). In this regard, the criterion related to the concentration of the waste generated (the most populated areas, as the biggest waste quantity generators, deter-

mine the landfill site location) should also be taken into consideration

- The Physical Plan is a base document which gives directions for choosing possible landfill site locations, but the same document should be upgraded according to the local circumstances.
- The costs for waste services to be unified among the municipalities (the most distanced ones will compensate their costs through paying lower prices for waste landfilling)

Presentation of the two Pre-feasibility Studies (PFSs) for integrated waste management (South-East and Polog Region):

The representative of the PointPro consulting company, Mr. Danco Uzunov gave a short and very precise overview of both PFSs, by making comparison between the Regions, with respect to how the densely populated areas which generate the biggest quantities of waste (per region) contribute, the initial investment for establishing regional integrated waste management system to be decreased?. In that case the costs for waste services are decreasing as well.

These two PFSs elaborate few possible alternatives for choosing the most appropriate landfill site location. In that regard, two separate public hearings (for both Regions) were carried out, in order to introduce the local citizens to the main findings of the PFSs.

It was commented, for the sake of not rejecting the chosen location for construction of a landfill, the local authorities should work more dedicated through direct communication with local citizens, in order to make them more familiar with the regional concept.

Session III: Waste Management Plans

In the following, the audience was introduced to: Requirements of waste management plans; Elaboration of waste management plans, the Latvian experience; Reforming of the waste management companies in response to EU requirements. (Mr. Armands Nikolajevs and Mrs. Kristina Veidemane)

The Waste Management Plans are required in order to make applicable List of Actions for establishing of good WM practices. For that purpose, a precise national legislation prepared in accordance to EU requirements should be prepared. The most respectable performance of the Latvian case is for sure, the closing of 500 operational landfills, and the establishment of 11 regional ones. This information was totally shocking for the audience.

Discussion:

- Introducing the new technologies and practices for economic and environmentally acceptable WM systems is in line with the adoption of the legislation (Adoption of the new legislation and implementation activities are two related issues).
- The promotion of selection and separate collection of waste commodities exclusively depends on the real need of some recyclables in the market. In this regard, one should first do an assessment of the local conditions.
- The habits of the citizens were changed gradually, mainly through carrying out very strong public campaigns.
- In a period of 5-6 years, they fully succeeded to close all the dump sites. The costs for reclamation of one small dump site are 30,000 .00 EURs (for comparison – half million Euros are needed for reclamation of a landfill for 40 – 50,000 inhabitants)

Session IV: Financing of the Infrastructure Projects in WASTE Sector

1. Cost recovery of the investments in Waste Sector

In the following, Mr. Danco Uzunov was presenting the best possible ways for attaining the available funds for financing the investment projects in the waste sector. The pre-requisite for investing in waste infrastructure projects is a good developed project documentation (Financing scheme / Base document / Detailed document), prepared in line with the requirements of the IFIs (International Financing Institutions) and International Investment Programs, as well as the local investment priority needs, which are determined through the detailed assessment performed in the context of the National Environmental Investment Strategies (NEIS).

Detailed assessment of alternatives for choosing the best possible one to be financed is needed.

The projects should be operational and be maintained during the operational period, what means not only the initial investment is needed to be estimated, but also the costs for operation and maintenance.

Discussion:

- The Municipalities have to be interested to reach useful information regarding the programs dedicated to local development.

2. IPA Instrument

The last item of the Agenda was elaborated by Mr. Jozse Jovanovski, representative of the MoEPP (Sector for Implementation of the IPA Instrument). He shared with the audience the requirements of the IPA application, for the purpose of attaining money for investing in infrastructure projects in the waste sector. The application formats should be suitably filled, as a kind of pre-requisite for requesting the financial resources for construction of a capital infrastructure projects.

Discussion:

- The crucial point of the discussion was that a unit for project development (this unit should be very

First IPPC workshop

The first workshop on IPPC was carried out in Skopje on 2-3 December, 2008 with an attendance of approximately 30 people, mainly environmental experts from the municipalities and municipal inspectors, in charge of the permitting. Experts from the Baltic Environmental Forum Latvia were Ms Daina Indriksone, and our new colleague, Mr Valters Toropovs, who has been working previously in a consultant company, which was helping to write IPPC applications in Latvia. As German expert, Dr. Bernd Serr from the Regierungspräsidium Freiburg. He is issuing permits and has been working in the European IPPC bureau in Spain, working on BREF documents.



The topics covered were the following:

Session I: Legal framework

- Brief overview on the IPPC directive – current requirements and future outlook
- Legislative framework for issuing B category permits in Macedonia
- Range of installations falling under the B category in Macedonia

Session II: Content of application

familiar with the IPA requirements for preparing the IPA application) is needed in order to prepare the project documentation in an appropriate way (according to all IPA requirements). Only in that case, 75 % of the investment will be covered by IPA funds.

- The municipalities should learn the whole process of project documentation development and filling in the IPA application forms (the MoEPP to be included as a supervisor), because this is the most acceptable way of making the municipalities responsible.

- Pre-evaluation of applications - steps to review an application to make conditions for permits
- Review of application for making conditions for permits – experience from Latvia
- Practical experience in evaluation of permit applications
- Involvement of public in application previewing process

Session III: Financial aspects

- Principles on taxes, bank guarantees
- Types of taxes, method of calculation
- Possibilities for bank guarantees, penalties - when these are applied

Session IV: Permit issuing

- The practical aspects of permit writing

Conclusions and recommendations:

- The participants emphasized the need for the representatives of the IPPC sector within the MoEPP to be more transparent and easy accessible for communication with the LSG? units. There is a lack of proper communication between the people who work within the environmental division (relating to these issues) of the municipalities and IPPC sector representatives from the MoEPP. (This has been resolved in a first step, as the present representatives provided contact information including mobile phone numbers to the audience, something which obviously had not been available earlier).

- The legislative sources (internet based) to be permanently updated regarding all new legislation issued with respect to B installation permitting procedure.
- Training programs for the local inspectors with respect to B installation permitting procedure, as well as controlling of the granted installations are needed (a good expertise would be needed on those workshops, with respect to IPPC, legal requirements, financial aspects and so on.)
- There is need for trainings/seminars regarding the practical aspects of writing a permit.

Second IPPC workshop

The second workshop was dedicated exclusively to the procedure for submission of an application for granting of a B integrated environmental permit.



1. The working day activities were started with: Determination of installations requiring B integrated environmental permits in Macedonia. An overview about the existing industrial sector and the type of industries that belong to the B category installations as well the current situation with respect to the number of installations acquiring "B" permits, criteria for identification of those etc. was given.

2. In the following, preparation of an application for issuing of a permit through a practical example was presented. A review on the available subsidiary legislation – Decrees/Ordinance was made. The form and the content of the application (chapters to be included) was discussed, as well as the required documentation that should be attached to the application.

Discussion:

The discussion of the first session considered the following issues:

- Some omissions of the national legislation with regard to provisions which should determine the rate of the recompense for noise and vibration were pointed out. Therefore, it is not possible to

calculate the annual compensation for possession of B integrated environmental permit.

- Every Municipality should keep a register of B installations according to the law. The representatives from the Municipalities asked for a standardized register – an identical tool for every municipality, as a part of the local environmental network, which is at the same time constituent of the MEIC (Macedonian Environmental Information Centre).
- Some omissions of the national legislation with regard to the announcement (publishing) of the application/permit and the time suitable for holding of a public hearing were stressed.. The representatives from the municipalities emphasized that is not properly clarified within the Law on Environment, when the public hearing should be held. According to the national legislation, the comments on the application/permit should be given to the MEPP, in written form, within 30 days from the date of the announcement of the application for IPPC permit, but what is the proper time to hold a public hearing?
- All required documentation should be attached to the application. A permit will not be issued if the owner of the installation did not submit as an attachment the construction permit, the final hand over? (commissioning) document and the approval of the EIA (Environmental Impact Assessment) study/elaborate?. There are cases when the application for issuing of a permit is rejected (is pending) because one of the other relevant permits has not been issued. The procedure for issuing of a B integrated environmental permit will be pending until those being obtained.
- There was a general impression that the installations are not enough prepared to fill in the application for issuing of a permit on their own, and very often they asked for consultant services. In order for the operator as well as the municipality to be on the safe side, it would be suitable if the consultants get certified for their services, and of course they have to be well introduced to solutions for improvement of the technological processes (to be economically and environmentally justified). At the same time, the municipality's personnel does not feel satisfactorily prepared to respond to all requirements related to the IPPC procedure (lack of capacities, lack of adequate training programs etc.). It would be appropriate, if the MoEPP provides a kind of Sectoral Guide-

lines – the emissions limit values to be determined for each specific type of industry. It was proposed by the audience that the municipality's personnel should get trained (specialized) in some specific industrial areas. For that purpose, numerous training programs from a technical point of view are needed.

- The operator is responsible for the reliability of data filled in the application. If there are any doubts about the content of the data, the inspector may ask for revision/taking of a control samples etc. According to the law, only when the regularity of data is confirmed and the doubts were proven to be baseless, the costs have to be borne by the municipality. In any other case, the operator is paying for all the analyses required. However, an agreement between the operator and the inspector should be made on confidentiality. Otherwise neither the inspector will rely on the information given by the operator, nor will the operator feel free to present the actual circumstances of its own capacity.
- The German experience is that the work on preparation of the applications is delegated to the consultants, but both the operators and the consultants are very conscientious and they stand stringent to the adopted legislation. Of course, sometimes time is needed for the operator to fully comply with the requirements in order to establish the proper environmental management within the installation, but that's for sure part of good negotiation with the municipality.

3. In the following, the practical experience in preparation of applications for permit issuance was presented. A winery "B" installation (granted with B-adjustment permit) was eager to share their experience with regard to: How were they instructed to prepare the application? Did they consult some professionals? Did they attend some training programs? What were the data needed to be included within the application?

Discussion:

The discussion in this regard considered the following issues:

- There was an impression that the winery made a great effort to comply with the IPPC requirements in almost every environmental area, performing their activities via good cooperation with the Municipality of Veles. However, no ap-

propriate solution for handling of organic waste coming from the process of wine production is presented within the area of installation. The representatives of the winery confessed they missed to propose appropriate solution for handling of the waste coming from the process within the application when they requested an adjustment permit, but at the same time it is a kind of mistake made by the municipality, which issued a permit on that basis. Also, they were aware they should take in consideration this omission and propose suitable solution for that purpose. What they emphasized as one of the positive experiences from the whole process of submission of an application for issuing of a permit was that afterwards they well knew the entire process of wine production, the follow products and by-products. They were well introduced to the material and energy process balance, so they knew what kind of output (the quantity and the quality of products) to expect depending on the input (raw material).

4. The last session of the day was related to practical experience in evaluation of applications - steps to review an application to make conditions for permits presented by the representative of the Regional Administrative Authority of Freiburg. Mr. Bernd Serr gave to the audience the practical examples on how to identify gaps within the application by pointing out the issues that should be tackled:

- It was pointed out that the BAT is not obligatory for "B" installations, but for the sake of having a technological process, which is both, environmentally and economically justified, it would be useful if the installations establish BAT.
- The importance of the work they do within the area of their installation in favour to the environment should be explained to the applicant and they should be asked to undertake some specific activities in order to prevent possible damage.
- The material balance of the process should be well known and presented on the flow chart.
- The list of all emissions, and sufficient and quality data/information should be prepared for the sake of carrying out easy inspection. The level of the emissions should be well known, and all discharges well controlled.

- In Germany, the designated authority is issuing a permit, but also a technical body exists that is controlling the process of issuing the permits.

The second day session was dedicated exclusively to the content of the B integrated environmental permits.

1. The working day activities were started with: Practical experience for issuance of B integrated environmental permits in Macedonia. An overview about the best ways of negotiation (advice for the municipalities) was given.

2. In the following, the conditions that should be included within the permit and negotiated with the installations (applicability of the permits) were promoted:

- Specifying the obligations
- Monitoring of the emissions
- Methods and frequency of measurements
- Negotiation and time schedule

Discussion:

The best advice for the municipalities with respect to the negotiations was resulting from the German and Latvian experiences. The best way of carrying out the negotiations is if the both negotiating sides, the operators and the inspectors/municipalities' officers, are well introduced to the IPPC and the industrial processes. That would mean that personnel is needed which is technically trained to understand the industrial processes and all the relevant information related to the specific industrial type. It is very important for the municipalities to determine the priorities, mainly because it's not possible to tackle all issues in an appropriate way at the same time, and with the same quantity of knowledge for every single industrial type.:

- The personnel should be trained on that specific industrial type, which is the most relevant within the municipality. For example, when the municipality receives the application, the personnel of the IPPC sector should be ready to respond appropriately by quick recognition of the lacks within the application.
- There should be a possibility for the formation of a joint administration between two or more municipalities in order to join the capacities they have for the purpose of performances with regard to B integrated permitting procedure.
- It's reasonably to give the operator the time needed to consolidate their capacities in order to

comply with the IPPC requirements, but it is obligatory that they stick to the negotiated deadline.

- It is very important to properly define the conditions under which the negotiations will be carried out. This knowledge is the missing in the municipalities. Training programs related to this are needed.
- It is recommendable to the operators, to organize themselves in Working Groups applicable to the specific industrial area, in order to acquire some knowledge through joint work on the identification of common adjustments for that specific type of industry (e.g. winery installations etc.). The WGs should also consist of representatives from the MoEPP, the inspectors, municipalities' personnel of the IPPC department, as well as consultants (professionals).
- A Quality Management (QM) board should be established on a national level which will function as a kind of supporting body (team) for both, the installations and the inspectors, to give them recommendations on how to perform the technical adjustments or how easily to recognize the omissions of the applications for issuing a permit, if there are any, and how to prepare the permits and to identify the conditions upon which the negotiation will be performed.

Conclusions/Recommendations

- It would be appropriate, if the MoEPP provides a kind of Sectoral Guidelines – the emissions limit values to be determined for each specific type of industry.
- It would be useful, if the municipality's personnel get trained (specialized) in some specific industrial sectors. For that purpose, numerous training programs from a technical point of view are needed.
- A Quality Management (QM) board should be established on national level.
- It is recommendable for the operators to organize themselves in Working Groups applicable for the specific industrial sector.

Energy efficiency training for Croatian trainers and local authorities

The initial special topics of the project for Croatia covered water and waste management and their implementation in the light of European Union legislation. Most recently, however, after discussions with the Croatian partners, it was possible to add another topic to the project: energy efficiency, climate change and the reduction of CO₂ emissions. A topic with the highest priorities on the political agenda not only in Croatia.

The issue was approached by specifically addressing the construction of new buildings. This focus was a result of the rising demand for newly built living houses, which could be observed all over Central and Eastern Europe with growing suburbs around the larger cities. Solutions to build highly energy efficient houses, not to speak of passive houses are until now largely unknown.

The tendencies are similar in Croatia, especially around the capital Zagreb and they seem to follow the same patterns, as in many Western European countries: the move of people out of the city into the fast growing single detached housing areas in the urban area increases the amount of inhabitants that need to commute everyday. Due to a lack of sufficient public transportation and infrastructure, an increasing demand for using individual cars is created and subsequently more energy and resources are wasted. Combined with a lack of knowledge to increase the efficiency of the energy consumption of houses this actually increases the emissions of CO₂.

Meeting the EU targets for CO₂-reduction will be a requirement also for Croatia if it joins the EU and, therefore, two directives 2002/91/EC and 2006/32/EC will also become binding and must be implemented.

The aims of the additional activities were to carry out an additional training to make the two mentioned directives understandable to the Croatian trainers and additionally engaged and interested staff from municipalities and to provide knowledge about basic aspects of holistic urban planning with regard to energy aspects.

An electronic document about the main aspects of energy efficient housing estate planning focusing on the needs of local and regional authorities with an introduction to the two most relevant EU directives was produced at the end.

The train-the-trainers programme was initiated by a study visit to Hanover, visiting the district Kronsberg.

History of Kronsberg

Politicians of social-democratic orientation thought of low energy houses in the nineties. Hannover City administration and environmental departments created the idea of energy efficient buildings when for the EXPO 2000 1,000 flats were rapidly needed. An urban planning competition was conducted already between 1990-94 and the EXPO Company granted 4 mil EUR for the building of the houses. A contract (Staedtebauliche Vertrag) was made between the city and investors. The settlement was designed by several architects and 3,000 flats were completed by 30 investors already at the time of the EXPO exhibition. A new planning concept was introduced, such as cooperative planning, roundtables for stakeholders (social, urban, green area, environmental planners), etc. Investors had to comply with higher energy efficiency standards that are 25-30% higher than today's standards, still every investor achieved it.

A quality assurance program was introduced for new buildings (and implemented by 9-10 officers) and it is still conducted nowadays. The price of the quality assurance was 50% subsidized by the city, in the amount of 10 EUR/m².

In total, around 6,000 flats have been built for 12-15,000 inhabitants until today in Kronsberg.

Enforcing energy efficient housing in a planning process

The tender information for investors contains certain rules that prefer energy efficient housing, e.g. passive house investors are preferred to others. There are supporting programs for private passive houses (e.g. KfW gives loans). The building of passive houses requires certain skills and references, and quality assurance is performed (building shell, ventilation, etc.). If the standard is not met, the investor should pay back, or pay a fine that amount to 10% of the building value.

Passive houses consume approximately 15 kWh/m³/year, while standard houses in Kronsberg consume app. 55 kWh/m³/year, which was 50% below standard when constructed, and today is app. 30% below.

In Germany, there is already an energy saving ordinance for construction and reconstruction of buildings in place. In 2007, the Kronsberg example was introduced to the whole area of the City of Hannover that accepted Agenda 21 as the city concept of sustainable development.

Certain planning instruments, like the development plan (Bebaungsplan) impose requirements like orientation of buildings to the sun.

In Hannover today, the average living surface is app. 40 m² per person, while in 90's it was 30 m². Mainly single households are increasing the average.

The traffic plan of Kronsberg says "do not go with the car unless necessary", and if you use the car, drive slowly. The idea of car free space and parking further from Kronsberg center, was however rejected. Transport is also arranged by tram, pedestrian and bike line. There are 8 km of tram lines that take you in 20 minutes from the city center to the EXPO region. In Kronsberg, there are stops every 500-600 m, while in Hanover, there are stops every 1,200-1,500 m.

A detailed plan for open space (Freiraumplanung) developed the concept of 1,000 inhabitants per quarter, where approximately 3 roads(?) (stripes) bring the fresh air to quarter.

Social issues

Kronsberg is a mirror of society, where old and young, rich and poor, disabled and not disabled live together. Approximately 1/3 of the houses are municipal owned and provided to people with lower incomes (2,700 flats), 1/3 private, 1/3 rented. There is mixture of flat sizes. Flats are available for rent at the price of 4-8 EUR/m². The property is sold by the city, and there is a 10% discount for every child under age 16, and up to 4 children - a rule applied only in Hanover.

People with low income are eligible, but in order to avoid problems, the standard income limit was doubled, so it is rather a "middle" class living area.

Kronsberg's financial cycle means that income from selling estates? was instantly used for building the infrastructure needed for the settlement, so everything is built at the same time. E.g. the first shopping center was arranged in a tent. In such a case, social problems and vandalism are avoided.

There are many foreigners with high education, but also high unemployment and lower income. There is a small settlement part called "Habitat" where 30 nations are selected to live here, out of which 10% are Muslim. Habitat contains a sauna, a Turkish bath, a party room, a prayer room, etc.

Conceptually named "Better together than alone", there are buildings designed for living of elderly people. Each individual has a single flat, but there are also premises for common activities.

Approximately 30% of inhabitants is younger than 18, and 80 new babies are registered every year, and there is generally a low fluctuation of inhabitants.

Kronsberg is a settlement with a high level of voluntary activities, public participation and citizen responsibility, with the community involved in solving problematic issues, instead of a top down approach.

Heat supply - Combined heat and power plant (CHP)

There is a cogeneration plant, electronically supervised and run by a municipal service that provides 80% of energy for Kronsberg district.

The energy plan is based on 3 principles:

- everybody is obliged to connect to CHP supply (compulsory)
- 3 components (district heating, low energy consumption, electric energy savings)
- the goal is 60% CO² reduction, 20% reduction by wind generation. (in total app. 80% reduction)

The technology used is a block powers plant that supplies 12 MW of energy from April-October and 2 additional cattles? during winter, and 2 buffers to store energy during summer. When the buffers are full the CHP stops working. There are 115 substations in residential houses that redistribute energy.

The energy supply suffices for more than 2,700 flats (3,000-4,000 people) and there is a reserve for another settlement.

The Kronsberg communal agency raised the awareness of people to use the houses in energy efficient way. The flat of app. 80 m² pays 80-130 EUR/month for water and heating. The unit price is higher because of CHP. The bill contains a fixed amount and a variable amount that depends on the oil price.

Instead of connecting to CHP, individual private owners have contracts with the restriction that the houses should use pellet heating and heat pumps, as well as solar collectors as energy sources.

Electricity

There are two windmills of 2.1-2.2 MW capacity, and additional one of 500 kW. Excess electricity from photovoltaic is bought by the electric grid, and the compensation fee outstrips the operational costs.

Pilot solar city

On roofs, solar cells are installed (surface 45 m², 5 kW power). The energy is used for heating and warming water. Usually, the houses are oriented east to west, but in this settlement they are planned to south. In summer, 80% of the energy is stored below ground in concrete storage and 20% beneath ground, and adapted as a playground.

Passive house of family Boom

There are 32 passive houses in a row, today being sold for the price of 1,200-1,400 EUR/m², and passive houses are only 10% more expensive than standard houses.

There are no radiators in the house, and no floor heating but heat exchanger in the attic. Used air is sucked from the kitchen and the bathroom and heat is given back to colder rooms. Cold old air leaves the house. During December and January (the coldest months), the outside cold air cannot be heated by inside air only, but needs preheating. Also, each person brings the energy of 75-100 W to the house.

Ceilings and walls are made of prefabricated concrete and assembled at place. The construction of the house takes 3 months. There is 45 cm wall insulation with wooden frame basic construction. Through the windows the heat of the sun goes in, not out, window frames have high energy insulation, and 3 window layers. There are 150 m³/hour air exchanges.

Green gardens/climate zones

There is a special green garden project for numerous buildings that contains an indoor watered area with humid microclimate, appropriate for raising plants. On top of the garden, there are 3 foils, differently charged. Depending on the outside temperature, the foil structure that protects from the sun or warms the interior moves away. Inside the structure, it is 5 °C warmer than outside.

Rainwater does not go to sewerage but is recovered in outdoor ponds or the storage near garages and is further used for watering or for waterfalls. This cuts the water costs by 30%.

Waste management

Today's waste plan in Kronsberg is standard, but 10 years ago it was beyond standard. Waste separation at the storage facility in front of the house is compulsory (e.g. bio waste, paper, etc.) and is collected once or twice a week. Glass is collected in public selection points.

Workshop

The second day completed the train-trainers programme with a workshop:

- Discussion: Energy efficiency from an European perspective (directives)
- Workshop part I: Energy efficiency and city planning: Introduction
- Workshop part II: City 2040 – a competition; working groups
- Workshop part II: Discussion of results
- Workshop part III: Results
- Feedback round, workshop closure

The objectives of two EU Directives related to energy efficiency in buildings were presented by Daina Indriksonė. Directive 2002/91/EC - Energy Performance in Buildings Directive (EPBD) sets up two main tasks:

- energy performance certification (EPC)
- energy upgrade when the building is renovated

The rules are applied for buildings having 1,000 m², with the tendency to decrease the limit. A national methodology has to be adopted for calculation of energy performance. The required minimum energy performance are set on a national level. Other requirements consider air conditioning, boilers and certification and inspection activities.

Directive 2006/32/EC on energy end-use efficiency and energy services (Energy Services Directive - ESD) imposes energy efficiency through the supply chains down to (target users?), and imposes primarily

- exemplary role of public sector, especially when using buildings, vehicles, equipment
- obligations to energy distributors/retailers

A discussion was held on two main issues:

- energy certificate of buildings
- difference between demand and consumption for EPC.

German experts explained that there are 33 types of non-living buildings in the country. Though the legislation is

in force, energy certificates are only randomly notable on buildings. Regarding old buildings, even if only one flat is being sold, the whole building has to acquire an energy certificate.

The heat transfer through roof, window, walls is the basis for calculation, and demand is based on 20 °C inside the building. Linked to that is the Kronsberg quality check in buildings for e.g. thermal bridges.

Part I: Energy efficiency and city planning: Introduction

Working group session: workshop participants put on stickers 3 ideas that came to their minds when thinking of urban energy efficiency. These could be either technical, economic or social aspects of energy efficiency, and they were grouped according to similarities. These guidelines served afterwards in part II.

Part II: City 2040 – a competition; working groups

Participants were divided in 3 working groups, each containing 3-4 participants. The task was to create visually "City in 2040", a town of 100-200,000 inhabitants, taking into account energy efficiency aspects of the former working group session. The task lasted for approximately 3 hours, with vivid discussion in every group, and City in 2040 was created on a poster, using colours and collage.

Discussion of results

Each working group presented the results by a rapporteur. The main aspects described in each group were:

- city concept (centralized, decentralized, several centers)
- transport
- energy efficient buildings (green buildings, passive houses, etc.)
- green areas
- sustainable economy
- energy supply (heat, electricity), renewable energy resources
- water supply and wastewater treatment
- waste management

Results

The workshop facilitators introduced an interesting way of evaluating 3 presented plans of the future City. Each participant had to evaluate the presented plan, including one's own, giving a certain number of points (the number of points for the own plan was restricted to two). Out of 3 the plans presented the highest number of points was

given to Indy town that involved three smaller round "centers" with all needed infrastructure, having one administrative center, and sustainable economy. Ms. Christianne von Knorre, the architect, emphasized that the 3 plans developed by workshop participants are identical to 3 main town plans well known in town planning.

Participants expressed their opinion about the site visit to Hannover, and the workshop. One of the most interesting issues tackled in the Hannover visit was the commitment of city administrators to explain the plan of Kronsberg, and pass the knowledge and experience on to others. Some of the aspects of sustainable planning of settlements (e.g. street drainage system) will be proposed and soon implemented in participating municipalities in Croatia. The workshop was described as very interesting, enhancing one's own planning skills. All participants hope to implement the knowledge in their own organization/municipality, and to conduct similar creative workshops in the future.

Study visit to Latvia on waste management for Macedonian stakeholders

Between 1-5 June, 2009 a study visit was organized to Latvia for 20 Macedonian local and regional self-government and ministerial representatives. The programme was developed by the project partner Baltic Environmental Forum and the local organization was kindly supported by the Latvian Country office of the Regional Environmental Centre for Central and Eastern Europe. The site visits were made possible by the Latvian Association of Waste Management Companies.

The decision for Latvia as the destination of the study visit was the result of a common workshop between our capacity-building project and the REC managed project "Priority Environmental Investment Programme for South Eastern Europe" (PEIP), financed by the EU CARDS-programme. It was considered that the developments in Latvia were very similar to the current processes in Macedonia and Latvia would thus be an ideal place to get more information about practical implementation of European waste legislation.

The programme of the study visit contained the following items:

June 1: Arrival of delegation in Riga

June 2, 2009

- Meetings at the Ministry of the Environment, Environmental Protection Department/Waste unit and Projects and Investment Department
- Visit to waste sorting centre in Riga in "L&T", Ltd
- Visit the Getliņi landfill of Riga city
- Return by bus to hotel

- Visit to hazardous waste landfill in Zebreņe, Dobele district
- Visit to dismantling centre on electric and electronic equipment, Tume, Tukums district
- Wrap up of tour (visit to Waste management enterprises association building)

June 3, 2009 VISIT TO THE NORTH VIDZEME REGION

- Headquarter of North Vidzeme region Waste management organization (ZAAO), Meeting with the regional waste management organisation – organisational, economic aspects, public education measures;
- Visit to the Regional solid waste landfill in Daibe – collection, landfilling of the waste; re-sorting of the separately collected waste;
- Departure to Riga via Turaida /Gauja national Park /Sigulda town

June 4, 2009 VISIT TO ZEMGALE/LIEPAJA REGION:

- Temporary hazardous waste storage in Gardene, Dobele district (management of the old pesticides)

June 5, 2009 Departure of delegation.

For the Macedonian participants the study visit to Latvia was very valuable, since there are certain similarities in size of population and quantities of waste generated. Therefore, technological solutions and organizational setups as they could be found in Latvia were really seen as suitable for a future of the waste management sector in Macedonia.

Moreover, the event has triggered discussions of further joint collaboration between Latvian experts and their Macedonian colleagues. Overall it had been a successful concluding event, which demonstrated in practice many of the issues, which were discussed during the workshops earlier in the project.

Publications

In the context of the project three publications were elaborated per country. An initial publication explained the basic principles of the EU system, EU environmental legislation, and the implications for national legislation in Croatia and Macedonia.

Additionally, a background document for Croatia on European Union legislation and energy efficiency was prepared, but disseminated among the target groups only electronically

The publications contained detailed information on the focus topics in each country and they gave information about the most relevant EU directives, national legislation, and also some information about how municipalities can handle different responsibilities that are new for the as a result of the approximation process.

Initially, the publications were supposed to be identical in content, with only the national legislation being adjusted for the specific requirements in Croatia and Macedonia. As a result of the different development stages of the approximation process and taking into consideration other publications that were already available on the local market, the project team tried to adjust the publications accordingly and to try also to fill gaps.

All publications were elaborated jointly by the Latvian and local project teams. While the former were responsible for overall frame and developing the part concerning the EU legislation, the latter were then in charge of gathering the necessary information regarding the national legislation and were responsible for translation, printing, and dissemination to the local authorities. In each country each local authority (and regional for Croatia) received at least one copy of each publication. The Macedonian publications were made available in Macedonian, as well as in Albanian.

Here, we present a brief overview of the publications.

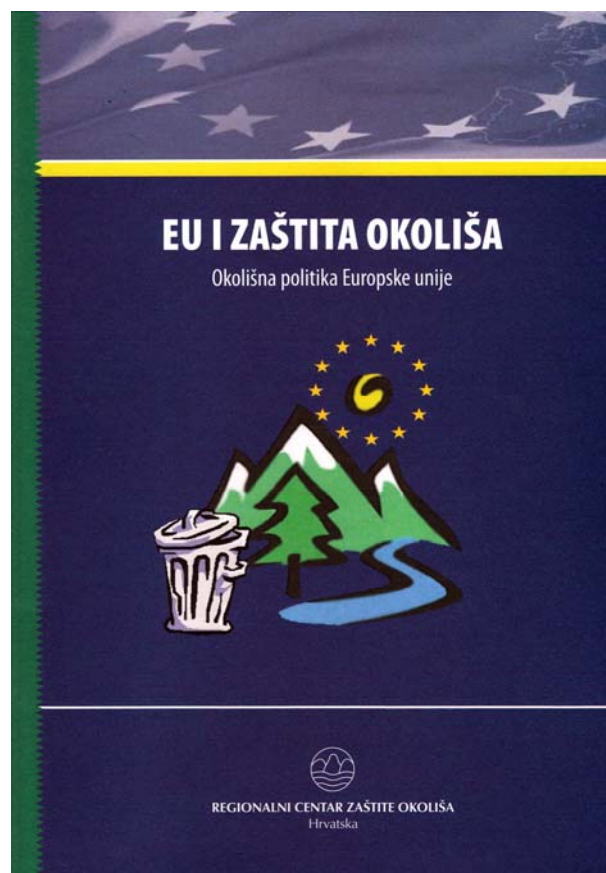
EU and its environmental legislation.

Croatia: The EU and environmental protection: environmental policies of the European Union.

The European Union is one of the most influential and powerful organizations in the world. It is a union of states that has its origins in 1951, having six countries signing an agreement. And now it has grown to an or-

ganization with already 27 member states. At the beginning it covered only one certain field of cooperation – the management of the coal and steel resources among the countries that have joined the agreement. But currently it covers almost every field of administration and economy.

Because of the impressive enlargement that took place in 2004, the European Union and each of its member states face many challenges, caused by the variety of changes that has been going on. But nevertheless, the European Union offers its member states many advantages that non-members do not have. Therefore, the wish for joining the European Union is a top priority issue for such countries like Croatia.



The European Union has developed its own institutional structure and it also has its own legislation that in general has priority over the national legislation. The legislation and activities of European Union is covering such areas as agriculture; audiovisual and media; common budget; competition; consumers; culture; customs; development; economic and monetary affairs; education, training, youth; employment and social affairs; energy; enlargement; enterprise; environment; external relations; external trade; fight against fraud; fisheries and maritime affairs; food safety; foreign and security policy; humanitarian aid; human rights; information society; institu-

tional affairs; internal market; justice, freedom and security; public health; regional policy; research and innovation; taxation; and transport.

To guarantee the sustainability of the European Union it is important to promote the continuing economic growth and the growth of social welfare by securing also environmental protection. Therefore the main aim of this publication is to introduce to the structure, history, institutions and functioning of the European Union putting the main stress on issues related to environmental protection.

Croatia is a candidate country for joining the European Union. And the activities of the European Union are bringing great changes in national legislation that have direct influence on the work of regional and local municipalities of each of its member country. Therefore the main target group of this publication are the municipalities and local authorities of Croatia.

Chapter 1 of the publication gives an introduction to the general structure of the European Union informing about the history, three pillars and the member countries of the Union.

Chapter 2 refers to the general information about the European Union introducing to the main institutions of the Union, their responsibilities and functioning.

Chapter 3 introduces the decision making procedure of the European Union by explaining the decision making mechanism and illustrating it with examples.

Chapter 4 shows the allocation of responsibilities to the European, national and municipal levels by explaining what is regulated at which level.

Chapter 5 of the publication informs more in detail about the history of the environmental policy of the European Union.

Chapter 6 continues the analysis of the Common European environmental policy, informing about its objectives and principles.

Chapter 7 gives comprehensive information about all the aspects related to the European environmental legislation. In this chapter the main instruments and areas of environmental competence are described. There is also an introduction to the most important directives given, covering the fields of waste management, waste management, air protection, integrated pollution prevention control (IPPC) and nature conservation.

And chapter 8 – the last chapter – gives the topical information for Croatia informing about the environmental aspects when accessing the European Union.

Macedonia

While in Croatia, there was still a need for more basic information the situation in Macedonia was already more advanced, with other publications explaining the EU part in detail being already available. Therefore, the publication focussed more on the national legislation and procedures that resulted from the adoption of EU legislation and it became a “Practical guidebook for Environmental Legislation.”



The publication presents the main foundations and responsibilities of the national as well as the local level and it provides details about the legal information systems and how to access further information about the tasks and duties of Macedonian municipalities with respect to all aspects of environmental protection.

Furthermore, it explains different tools and methods of managing environmental protection locally in order to fulfil the EU and national requirements, e.g. covering aspects of strategic planning on local level, as well as monitoring.

The publication also makes already reference to some aspects of IPPC, but looking more at the holistic approach of the legislation.

In sum, the publication is not primarily giving an overview of what is EU environmental legislation, but specifically what is the philosophy behind different details of tasks and how to comprehensively tackle environmental problems.

Publications on focus topics

Croatia: EU Policy and waste management on local level

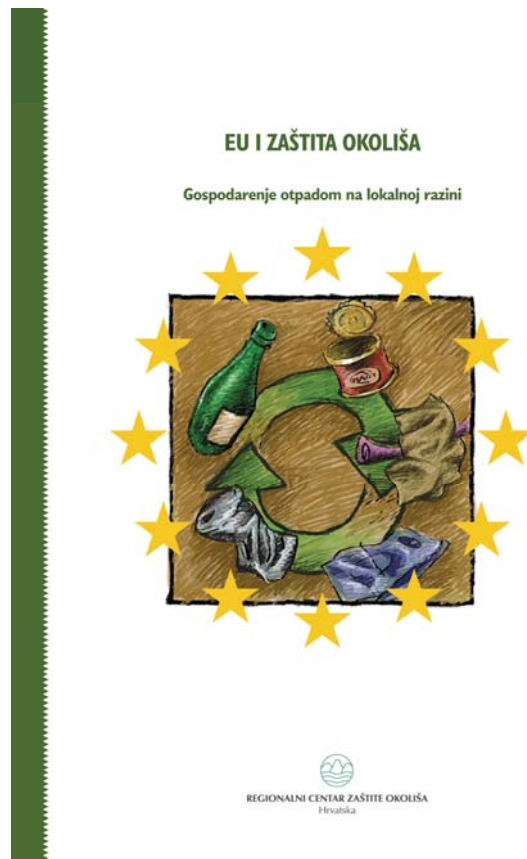
The goal of this booklet is to provide an overview on relevant EU legislation and its implementation in legislation of Croatia and to inform about EU targets, key principles, instruments, and responsibilities in the field of waste management. We have included also some case and examples on practical implementation of the waste management in EU and Croatia.

Waste management is one of the priority environmental issues for various institutional levels. Waste legislation was among the first environmental legal acts of the European Union in order to establish common principles to protect environment from inadequate waste handling.

According to the European statistics on the waste management, one European person generated in average 524 kg of municipal waste in 2007. This means that more than 260 million tonnes of municipal waste is generated on average in 27 EU countries. Moreover, industrial and hazardous waste are additional environmental pressure besides municipal waste.

The waste sector is complicated due to the complexity of waste streams – it involves many actors and due to changes in consumption patterns in many countries of Europe, new waste streams have been created for which no environmental sound management experience exists (e.g. end-of life vehicles or electronic scrap).

The waste sector involves a lot of infrastructure and investments to ensure that environmental impacts are eliminated or reduced. Building of new landfills and related to that a site selection are challenging tasks for which close cooperation among various stakeholders is very essential.



Croatia: EU Policy and Water management on local level

The goal of this booklet is to provide an overview on relevant EU legislation and its implementation in legislation of Croatia and to inform about EU targets, key principles, instruments, and responsibilities in the field of water management.

Similar to Waste, water management is one of the priority environmental issues for various institutional levels. Water legislation was among the first environmental legal acts of the European Union in order to establish common principles to protect environment from inadequate waste handling.

Historically, water policy was based on the end of pipe solutions, treating wastewaters to reduce the pollution loads discharged to rivers and lakes. Now, in the 21 century the key focus is to have holistic approach to the management of the water resources. The Water policy addresses quality and quantity aspects as different countries face different water management problems. Particular attention is given to ecological aspects of all water ecosystems.

Water sector involves a lot of infrastructure and investments to ensure that pollution to water bodies are reduced to desired level. The maintenance of safe drinking water supply demands a lot of investment money, especially, in the countries where the investments have been made decades ago.

EU I ZAŠTITA OKOLIŠA
Upravljanje vodama na lokalnoj razini



REGIONALNI CENTAR ZAŠTITE OKOLIŠA
Hrvatska

Stakeholder involvement is an important prerequisite to support and ensure that the water management objectives are achieved. Therefore, governments are establishing different mechanisms to encourage different interests to take their measures for better water management.

Croatia: EU Policy and energy efficiency

The survey for actual best practice examples of energy optimized municipalities in Croatia generated lists of good examples of retrofitted public buildings in ownership of the municipality or retrofitted residential houses or even new privately owned passive houses.

All these examples show the most urgent needs in Croatia and so far they are very important. Although the goal of the survey was to identify best practice examples for energy optimised municipalities (case studies), the key findings included retrofitting or individual construction of passive houses. We can conclude that the main present aspect of energy efficiency in municipal housing in Croatia is not the holistic urban planning.

But nevertheless, holistic housing planning is more than comparing the consumption of energy before and after the implementation of energy efficiency measures. Municipalities have broader duties as to maintain their own shrunken building stock. Building activities are ongoing, detached houses are growing mushroom like in the green belts round the big cities. A simple calculation shows the current approach: even if these new buildings will fulfill a high energy standard, high energy consumption can be estimated for the daily transportation needs. Is there a possibility for municipalities to influence activities of private investors in a way to take holistic components, i.e. more than energy standard of the house into account?

The main task of this paper is to discuss some basic ideas of urban planning related to energy consumption and to show how classical planning ideas or instruments used in Germany can be used for energy optimized municipalities in Croatia. Important part of the paper is best practice examples of Hannover-Kronsberg, that was visited by representatives of REC Croatia and two Croatian municipalities (Koprivnica and Samobor) in February 2009. This best practice example is introduced by a historical chapter with some general aspects of urban development and increased consumption of fossil energy.

The text is completed with overview of current situation in Croatia. The intention is to provide guidelines to the challenge: What can Croatian municipalities do to influence the behavior of private investors towards energy optimized municipality?

Macedonia: EU Policy and waste management on local level

The Macedonian and Croatian versions of the publication are very similar (therefore, see introduction above). The main difference in the Macedonian version is apart from the national section, that some more specific aspects of funding were addressed, which were also discussed with the participants during the workshops.



Macedonia: Integrated pollution prevention and control: EU policy and its implementation at local level

By the time, the publication was prepared a lot of basic information on IPPC was available already in Macedonia. Therefore, the team focussed on filling gaps, i.e. finding issues that were so far not covered, which lead to a very practical guide book for municipalities on how to actually process a whole application and permission procedure and how to efficiently use their limited resources.

Industrial processes, particularly large scale, can have a significant influence on environment. In order to prevent or at least to reduce potential negative impacts, industrial

and agricultural enterprises with a high pollution potential are required to improve their used technologies and rearrange their activities towards more environmentally friendly production processes.

Particular requirements for industrial operators in the European Union (EU) were set in 1996 by the EC Directive concerning integrated pollution prevention and control (IPPC). The aim of this directive is to prevent or reduce pollution of the atmosphere, water and soil, as well as the quantities of waste arising from industrial and agricultural installations, to ensure a high level of environmental protection. The Directive establishes a procedure for authorising of polluting activities and sets minimum requirements to be included in permits, particularly in terms of pollutants released. Currently the scope of Directive covers about 52,000 installations in the European Union (EU-27).



Implementation of the IPPC Directive requires investments, capacity building as well as close cooperation between industrial enterprises, local and regional authorities, ministries and the society to decide on permit conditions. Therefore even more than 12 years after its adoption, implementation of this Directive still remains challenging for all EU Member States.

The goal of this booklet is to provide an overview on the relevant EU policy and national legislation requirements in the Republic of Macedonia as well as to give some practical recommendations for implementation of the IPPC requirements based on permit issuing experiences in Germany. We have also included a description of other relevant information sources related to IPPC in the Republic of Macedonia.

CONCLUSIONS

Generally, we can conclude that the project was implemented successfully. With the additional workshop preparation seminar, the topic energy sound urban planning for Croatia and the study visit to Latvia for Macedonian authorities, quite substantial additions could be made to the original project plan. These were possible thanks to additional funding and to cooperation with another project, which created synergies and mutual benefits.

It must be stated, that the dynamics of the approximation projects is high in both countries which had an impact on the project as it required changing the programmes of seminars and adapting them to recent developments in the legislative process.

Looking at the countries separately, Croatia is surely the more advanced country, thanks to a better developed infrastructure and more economic power. This is particularly visible in the waste sector, where – although being a national best-practice example – e.g. the island of Krk is equipped with an up-to-date waste management system and the adequate facilities. The water sector is a trickier topic for Croatia. It became visible during the seminars that the power of the national water facility company, Croatian Waters, is overwhelming. It controls the water supply system of the whole country and leaves very little space for local and regional authorities to act independently in this field. From an outsider's perspective the atmosphere was at times confrontational and not very cooperative. In both fields the main focus will probably be on investment and modernizing and upgrading the infrastructure. As a whole, the environmental sector on a national level has scattered responsibilities among many different ministries.

We must note here additionally, that the publication on Water management in Croatia caused a substantial delay for full completion of the project (eventually the publication could only be disseminated in spring 2010). Firstly, the cooperation with the responsible ministry, the Regional Development, Forestry and Water Management

and the Croatian Waters, considered the first drafts as not valuable for Croatia, and for a very long refused to provide any support for finding solutions what should be improved exactly. Another setback happened right before the Christmas break of 2009 - after having already submitted the publication for layout, the new Water Act and Water Management Financing Act came into force (adopted on the last December session of the Parliament on urgent procedure, so it wasn't possible to predict the timing in advance). We were informed of it in early January 2010, and requested by the same authorities to update the Manual with the new legislative changes, because the changes in terms of local/regional level were substantial, and it was also important to reflect in the publication that the Croatian water sector legislation is now fully harmonised with the EU acquis

In Macedonia, the waste sector is still in the stage of finding suitable ways to organize the management of waste effectively. The lack of an intermediate regional administrative level currently makes the regional cooperation among local authorities difficult. Each municipality is trying to find its own way and only slowly the benefits of cooperating among each other is making its way to the minds of the stakeholders in the field. With respect to the IPPC, Macedonia has a very unique situation, which is again caused by the lack of the regional level. While ministries issue the so-called 'A' permits, municipalities are struggling with their limited resources to issue B-permits for smaller installations. We have particularly focused in the project on offering pragmatic tips to organize the everyday work in this respect, prioritizing and handling a wide range of industrial branches with the given constraints. For both topics more support is helpful on the capacity-building level. The water sector, which was not yet an issue for Macedonia, as the relevant legislation was not yet developed at the project's start, will be a topic for the future.

Looking finally at the project implementation, it must be stated, that working in the target countries of this project requires more time and flexibility, as it may be necessary

in many Western European countries. This is and will be a challenge for getting Western experts, who need to be informed long in advance, to seminars and workshops. Keeping this in mind however, helps to cope with the different speeds. The advantage on the other hand is, that in both countries changes can be arranged on short notice to a certain extent, which would not be possible e.g. in Germany and Latvia.

Political decisions are also taken very quickly, as it happened with the Water and Financing Acts in Croatia and project teams working in the region should always be prepared for that. Nevertheless, such a decision may of course also happen in favour of a project, but cannot be predicted in any way.