

# **FINAL NARRATIVE REPORT**

Bosnia and Herzegovina

Thematic window Environment & Climate Change

# **Programme Title:**

Mainstreaming Environmental Governance: Linking local and national action in Bosnia and Herzegovina

# **Prologue**

The MDG Achievement Fund was established in 2007 through a landmark agreement signed between the Government of Spain and the UN system. With a total contribution of approximately USD 900 million, the MDG-Fund has financed 130 joint programmes in eight Thematic Windows, in 50 countries around the world.

The joint programme final narrative report is prepared by the joint programme team. It reflects the final programme review conducted by the Programme Management Committee and National Steering Committee to assess results against expected outcomes and outputs.

The report is divided into five (5) sections. Section I provides a brief introduction on the socio economic context and the development problems addressed by the joint programme, and lists the joint programme outcomes and associated outputs. Section II is an assessment of the joint programme results. Section III collects good practices and lessons learned. Section IV covers the financial status of the joint programme; and Section V is for other comments and/or additional information.

We thank our national partners and the United Nations Country Team, as well as the joint programme team for their efforts in undertaking this final narrative report.

MDG-F Secretariat

The analysis and recommendations of this evaluation are those of the evaluator and do not necessarily reflect the views of the Joint Programme or MDG-F Secretariat.



### FINAL MDG-F JOINT PROGRAMME NARRATIVE REPORT

	Participating UN Organization(s)		
(	(indicate the lead agency)		Pl
i	UNDP – Lead Agency		re
i	UNEP		
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# Sector(s)/Area(s)/Theme(s)

Please indicate Thematic window and other relevant sub thematic areas

- Environment and Climate Change

### **Joint Programme Title**

"Mainstreaming Environmental Governance: Linking local and national action in Bosnia and Herzegovina"

### **Joint Programme Number**

**MDGF 1684** 

Joint Programme Cost [Sharing - if applicable]		Joint Programme [Location]
[Fund Contribution): USD 5,499,863		Region (s): Bosnia
		and Herzegovina
Govt. Contribution:	USD	Governorate(s):
Agency Core Contribution:		
Other:		District(s)
TOTAL:	USD	

Final Joint Programme Ev	aluation
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Final Evaluation Done Yes  $\square$  No  $\square$ Evaluation Report Attached  $\square$ Yes  $\square$ to Date of delivery of final report

### **Joint Programme Timeline**

#### Original start date

start date of the programme December 10, 2009

#### Final end date

(including agreed extended date) May 31, 2013

## Participating Implementing Line Ministries and/or other organisations (CSO, etc)

Ministry of Foreign Trade and Economic Relations BiH, Ministry of Spatial planning, Construction and Environment of RS BiH, Ministry of Agriculture, Forestry and Water Management RS BiH, Ministry of Environment and Tourism FBiH, Municipalities, Cantons, Civil Society Organizations etc.

#### I. PURPOSE

a. Provide a brief introduction on the socio economical context and the development problems addressed by the programme.

Bosnia and Herzegovina (BiH) is a country still recuperating from the problems and infrastructure it inherited from the break-up of the former Yugoslavia. Most obviously this concerns a war that happened from 1992 - 1995 that officially ended nearly twenty years ago, but continues to have political and economic ramifications to this day. The national economy is very slow to recover, while the fragmented and overly-bureaucratic political system hardly lends itself to stimulating productivity; together these two factors lead to critical environmental stagnation as such issues are rarely considered a priority by decision-makers.

On the other hand, the goal of this Joint Programme (JP) is to deal with each of these components, intending to essentially "kickstart" both economic resources and political will to deal effectively with these problems. In order to facilitate such matters, comprehensive planning mechanisms are designed to replace authorities' typical *ad hoc*, reactive measures with streamlined, innovative actions based on strategic-planning documents. Besides emphasizing the ability of stakeholders from local to national levels to play a positive role, they are founded on inclusive environmental governance principles and the idea that successful environmental services require both horizontal and vertical cooperation.

b. List joint programme outcomes and associated outputs as per the final approved version of the joint programme Document or last agreed revision.

Outcome 1: Improved local level environmental planning.

- Output 1.1: Effective local level participatory environmental planning mechanism strengthened.
- Output 1.2: Cross-cutting environmental governance methodology integrated into local participatory planning process.
- Output 1.3: Strengthened capacity of 30 Municipalities for environmental planning and programming.
- Output 1.4: 30 LEAPs defined and agreed by Municipal stakeholders.

Outcome 2: Enhanced management of environmental resources and delivery of environmental services.

- Output 2.1: Improved management of environmental resources in 30 Municipalities.
- Output 2.2: Priority actions identified and addressed in 30 LEAP Municipalities.
- Output 2.3: Improved environmental, energy, water and sanitation services in 30 Municipalities for the poor.

Outcome 3: Increased national environmental awareness and action, localizing and achieving the MDGs.

- Output 3.1: Documentation of the legal and institutional background for environmental governance and State and Entity level.
- Output 3.2: Reliable environmental indicators to inform State and Entity policy development.
- Output 3.3: Increased public access to environmental information.
- Output 3.4: Expanded access to environmental finance.
- Output 3.5: Greater implementation of environmental governance actions demonstrating innovation, poverty reduction and social inclusion approaches and addressing the achievement of MDGs 6, 7 and 8 through improved service delivery.
- Output 3.6: Lessons and best practices from effective delivery documented and used to inform policy development.
- c. Explain the overall contribution of the joint programme to National Plan and Priorities

The ENV JP is highly relevant for BiH to support its efforts in developing its environmental protection and climate change strategies and actions. It responds well to the development objectives of BiH and to those

of UN Agencies in BiH. The design of the joint programme is well rooted in the country priorities and the ownership of the programme by stakeholders has been excellent. It is a high-quality response mechanism to support BiH in addressing climate change priorities. The programme logic is clear and based on integrating three essential components, and appropriately designed to respond directly to the main constraints identified to sustainable environment management.

ENV JP is linked to national environmental strategic documents but the present strategic basis is weak. There is still no current and specific integral policy document on environment in BiH. The main policy document on environmental issues is the NEAP prepared with support of the World Bank and adopted in 2003 in both Entities. Furthermore, the Medium Term Development Strategy (MTDS, 2004-2007) defines relevant key goals, such as: (1) creating conditions for sustainable and balanced economic development, (2) reducing poverty and (3) acceleration of the EU integration process. The MTDS identified 12 priority sectors, out of which five are directly linked to environment – Agriculture, Forestry, Water Management, Environment and Energy. The three key environment related priorities identified in the MTDS are: (a) strengthening the legal and institutional framework; (b) improvement of the system of funding and capacity in this sector (through the establishment of environmental funds) and encouraging local level implementation; and (c) strengthening environmental statistics.

ENV JP is directly relevant for achieving the MDGs. The ENV JP is also aligned to MDG 7: Achieve environmental sustainability; and MDG 8: Develop a global partnership for development. Due to the close linkages and reliance of the poor on the environment for their livelihoods, the JP also contributes indirectly to MDGs 1 on eradicating extreme poverty and hunger; and to MDG 6 on combating diseases, due to the close association of environmental degradation to the spread of diseases through air and water pollution.

The previous UNDAF had little discussion specific to climate change, owing to a limited understanding about the matter at the time that it was made. Thus, the link of the programme to the previous UNDAF in BiH was only of indirect nature in the Programme Document (UNDAF Outcome 1: "Strengthened accountability and responsiveness of government to pro-active citizens"). However, the ENV JP is now aligned to the current BiH UNDAF 2010-2014, Outcome 3: "By the end of 2014, Government meets requirements of EU accession process and Multilateral Environment Agreements, adopts environment as a crosscutting issue for participatory development planning in all sectors and at all levels, strengthens environmental management to protect natural and cultural resources and mitigate environmental threats". Thus, the programme is now much better linked to the overarching effort associated with the environmental theme, increasing the programme's relevance.

d. Describe and assess how the programme development partners have jointly contributed to achieve development results

Each of the five UN partner agencies (UNDP, UNV, UNEP, UNESCO and FAO) have jointly contribute to achieve significant results within this JP. The amount to which each agency factored into the overall results is more or less proportional to both the financial budget and human resources allocated to the JP by each agency. UNDP, as the lead agency and the one with the highest budget and most staff assigned to the JP, obviously generated the most results, while UNESCO was limited by financial and man-hour capacities to contribute more. While more might have been done to conduct joint actions between agencies, the original planning document actually failed to provide concrete guidance on such matters. Despite this, the five agencies still managed to coordinate their activities with each other and actually achieve more in such a joint format than they would have on their own, for example: UNV acted as a very close partner with UNDP on LEAPs and pilot projects, UNEP and FAO worked together developing environmental indicators for the State of Environment Report for BiH 2012, and UNESCO coordinated its culture/nature activities to parallel UNDP's energy focus.

Outside of the UN system, the national partners on the JP (national and entity ministries related to environmental matters) also contributed to results. Their representatives provided oversight within the PMC, advised on the development of local planning and pilot projects, as well as national documents such as the green economy sectoral study and the State of Environment Report, consulted closely on national-level planning/reporting, etc. Without their leadership serving as an example to other government

stakeholders, or them claiming ownership of national/entity environmental issues, this JP would not have achieved the sustainable results it has.

#### II. ASSESSMENT OF JOINT PROGRAMME RESULTS

a. Report on the key outcomes achieved and explain any variance in achieved versus planned results. The narrative should be results oriented to present results and illustrate impacts of the pilot at policy level)

All three JP Outcomes have been achieved, without any crucial variance in achieved versus planned results, except in the sense of having actually accomplished quite a bit more than was originally planned in the initial planning documents. Local-level planning was tremendously improved (Outcome 1), e.g. with a large increase in local planning documents, hundreds of local stakeholders trained in local planning and clear guidelines laid out for future local planners. Meanwhile, the management of environmental resources/services has been greatly enhanced (Outcome 2), e.g. with many local pilot projects providing role models to stakeholders, including substantial co-financing and ownership from local decision-makers, linkage to returnee/refugee issues and natural/cultural heritage. Finally, national environmental awareness/action linked with the MDGs was particularly successful (Outcome 3), e.g. through development of a first State of Environment Report, analysis of legal/institutional framework for environmental protection in the country, the creation of a national climate change authority, linkage of reliable indicators with national planning, improved access to environmental information, innovative pilot projects serving as best practices, nationwide energy monitoring of public buildings, entity environmental funds becoming better harmonized, national/entity capacities being strengthened, "green economy" investment analyses and lessons/successes being widely disseminated to ensure future sustainability of JP goals.

b. In what way do you feel that the capacities developed during the implementation of the joint programme have contributed to the achievement of the outcomes?

The capacities of local and national counterparts have been continually developed throughout the JP, especially regarding environmental governance and policy-making, without which the achievement of Outcomes 1-3 would not be feasible. Local level stakeholders strengthened their capacities tremendously in environmental planning and financing methods; at the national level, actors crucially began cooperating with each other in a more structured manner, such as during national planning consultations. Additionally, capacities of national counterparts have been continually developed throughout the JP, generally regarding environmental reporting, governance and policy making and informing policy development.

c. Report on how outputs have contributed to the achievement of the outcomes based on performance indicators and explain any variance in actual versus planned contributions of these outputs. Highlight any institutional and/ or behavioural changes, including capacity development, amongst beneficiaries/right holders.

Outcome 1 has been achieved through:

Output 1.1: Local environmental planning mechanisms were established such that stakeholders in many municipalities are not only knowledgeable about planning issues, they are capable of delegating responsibilities and coordinating efforts of a team given such a task.

Output 1.2: These same local coordinators, as well as their colleagues, were trained in the most relevant environmental issues that should/could be covered at the municipal level, a methodology also laid out in detail in an updated Local Environmental Action Plan (LEAP) handbook; a study was also conducted to determine how best to integrate land management issues into municipalities who had already adopted LEAPs before the JP.

Output 1.3: Hundreds of local stakeholders from various sectors in many municipalities were also trained in environmental planning/programming, and how to support a team given such a task.

Output 1.4: In the end, these same municipalities were able to develop, adopt and begin implementation of truly-comprehensive LEAPs and Sustainable Energy Action Plans (SEAP) which provide a clear vision of how local authorities can collaborate with other local stakeholders to claim ownership of environmental issues

Outcome 2 has been achieved through:

Output 2.1: Improved management in many municipalities through support given to pilot projects and workshops given to some municipalities for land management issues. In scope of the output 2.1.3 Promoting sustainable use of natural resources, the first Green Economy Sectoral Modelling study was produced, which introduced the idea of green economy to the country in a very applicable way.

Output 2.2: Priority actions were successfully identified in collaborations between local civil society and municipalities together claiming ownership of local environmental problems, further proven by the significant matching funds provided by local authorities.

Output 2.3: These same pilot actions improve not only the environmental, energy, water and sanitation services of local communities, but also serve as best practice models for others to follow and include examples of how environmental concerns can be linked to refugee/returnee issues and natural/cultural heritage sites as well.

Outcome 3 has been achieved through:

Output 3.1: Documentation of the legal and institutional background for entity/national environmental governance has been summarized in a pioneering desk review publication, already in use by governmental officials, in particular providing a "road map" to the national ministry. A website has been established with a database of local environmental experts and the finding of the desk review of the Legal and Institutional Framework for Environmental Protection in B&H were uploaded. A governmental needs assessment has been done, including the finalized Gap Analysis for a Comprehensive Environmental Information System in B&H, linked to existing environmental databases/information sources.

Output 3.2: Reliable environmental indicators were devised to inform national/entity policy-making, in particular the creation of an official inter-entity commission responsible for BiH's obligations concerning the Kyoto Protocol and the approval of Climate Development Mechanism (CDM) projects in the country.

Output 3.3: Increased public access to environmental information has been substantially improved through a comprehensive gap analysis of relevant data, the linkage of disjointed databases/sources into a nationwide Environmental Information System (EIS) publicly-accessible online and the highly successful/inclusive first National State of Environment Reporting (NSoER) process, which combined national capacity development with consultations of numerous relevant national/entity stakeholders.

Output 3.4: Access to environmental finance was expanded nationally through innovative pilot projects coordinated with local, national and international stakeholders to provide very substantial co-financing and role models for how other actors might cooperate on similarly beneficial actions, for example inclusion in the nationwide monitoring Energy Management Information System (EMIS) also the entity-level environmental funds expanding the scope of their activities across the country.

Output 3.5: Capacities were developed to link environmental governance, poverty reduction, social inclusion and the delivery of the MDGs, based on needs assessments at the national level of priority areas (e.g. monitoring/reporting, mainstreaming Multi-lateral Environmental Agreements and "green economy" investments), as well as efforts to bring efficient energy to remote/poor populations.

Output 3.6: Best practices were well documented and spread to the public via several online platforms, in order to effectively deliver lessons learned to other stakeholders.

d. Who are and how have the primary beneficiaries/right holders been engaged in the joint programme implementation? Please disaggregate by relevant category as appropriate for your specific joint programme (e.g. gender, age, etc)

The primary beneficiaries have been thoroughly engaged in JP implementation from the very start. National/entity stakeholders (e.g. ministries, agencies, environmental funds, parliamentary members, etc.) have been involved since the beginning in a number of activities: as members of the PMC, discussions on local planning and pilot project development, representation on the national CDM commission, consultations for national-level reporting/planning, participation in conferences, etc. Likewise, local beneficiaries/rights holders (e.g. municipalities, NGOs, public utilities, private companies, schools, private citizens, etc.) have been strongly involved in many activities: local-level planning, capacity-building workshops, consultation on and implementation of pilot projects, etc.

Overall, more than twelve thousand people have participated directly in various stages of JP implementation, with the vast majority of these being for local-level activities (especially environmental planning). It's not possible to realistically disaggregate all of these participants by gender, age, etc. for each JP activity, but in most cases the gender balance ranged from about a third to half (in a few cases

even more) for female participation. The age distribution was mainly adults, though a few JP activities did seek to include more participation from both the youth and elderly.

- e. Describe and assess how the joint programme and its development partners have addressed issues of social, cultural, political and economic inequalities during the implementation phase of the programme:
  - a. To what extent and in which capacities have socially excluded populations been involved throughout this programme?

Socially-excluded groups have been encouraged to participate at most levels (e.g. women, youth and the elderly), especially so in local environmental planning as consultants/participants to the multi-stakeholder groups developing LEAPs and SEAPs as well as target population of some investment projects.

b. Has the programme contributed to increasing the decision making power of excluded groups vis-a-vis policies that affect their lives? Has there been an increase in dialogue and participation of these groups with local and national governments in relation to these policies?

As mentioned above, dialogue between traditionally-excluded groups and local governments was increased during local environmental planning processes, though the degree to which they took part in decision-making powers was more limited. While most marginalized groups were included within the consultative phases of LEAP/SEAP development, the only one of these groups to consistently be in a position to make decisions were women.

c. Has the programme and it development partners strengthened the organization of citizen and civil society groups so that they are better placed to advocate for their rights? If so how? Please give concrete examples.

Civil society groups were actively involved in nearly all activities of the JP, most notably during LEAP, SEAP, pilot project and SoER development, in each case directly improving their stake in environmental decision-making processes and contributing to better collaboration with governmental counterparts in both policy development and the realization of cooperative action.

d. To what extent has the programme (whether through local or national level interventions) contributed to improving the lives of socially excluded groups?

Besides the JP-wide emphasis on linking environmental priorities with social inclusion, a concrete example would be found in the JP's efforts specifically targeted such neglected populations as beneficiaries, in an initiative to bring renewable/efficient electricity to returnee/refugee communities living in remote parts of the country - an approach soon to be replicated nationally by UNDP.

- e. Describe the extent of the contribution of the joint programme to the following categories of results:
  - a. Paris Declaration Principles
  - Leadership of national and local governmental institutions

Programme partners exercise effective leadership over their development policies and strategies and co-ordinate development actions; this has been particularly apparent for the ENV JP actions taking place at State and local levels.

- Involvement of CSO and citizens
  In each activity, local and national, there has been huge involvement of CSO and citizens. On local level, particularly on development of LEAPs and SEAPs but also in implementation of LEAP grants and on National great participation of CSOs on development of SoER.
- Alignment and harmonization

The programme has based its overall support provision on the various BiH programme partners' development strategies, organizations and procedures; particular account was taken of the prevailing administrative and policy-making structures, characteristic for BiH.

Throughout the ENV JP, donors actions have been harmonised, transparent and effectively combined; for instance joint actions with USAID and GIZ have been implemented in a harmonised manner, leading also to synergies in approach and funding.

Innovative elements in mutual accountability (justify why these elements are innovative)

Strong involvement of all levels of government in Bosnia and Herzegovina, from planning to execution that is seen by direct involvement in almost each activity, followed by adoption of all plannes and strategies. Another example is high co-financing of activities, especially innovation and LEAP grants, that highly contributed to ownership but in a sense all of this to innovation as this has not really been a case prior to the programme.

- b. Delivering as One
- Role of Resident Coordinator Office and synergies with other MDG-F joint programmes

RCO has been responsible for the work of the PMC but also coordinating activities and efforts for achieving MDGs in the country. Coordination among all 4 MDGs in Bosnia and Herzegovina was heavily done by the RCO. Also, RCO has been involved in overall M&E, communication and public relations of the programmes (all 4, in order to better present the :big picture" in the country).

• Innovative elements in harmonization of procedures and managerial practices (justify why these elements are innovative)

Common M&E, communication and public relations for achieving better results through raising awareness of national stakeholders, accountability and importance of achieving MDGs in the country. This programme would not have achieved such national awareness on it's own without linking it with other MDGs in the Country. Bosnia and Herzegovina received 4 MDGs (Youth, Culture, Democratic governance and Environment and CC).

Joint United Nations formulation, planning and management

The programme took a strong approach in managing resources and improving decision-making for results; throughout the implementation the achievement of durable results has been the main focus of work, both of agencies and programme partners.

MDG-F, other donors and programme partners are accountable for achieving the desired development results. This has been particularly obvious for the individual actions taking place at local levels. The benefiting municipalities demonstrate a high degree of accountability as concerns programme outputs and results.

#### III. GOOD PRACTICES AND LESSONS LEARNED

a. Report key lessons learned and good practices that would facilitate future joint programme design and implementation

#### State of Environment Report for Bosnia and Herzegovina

In the framework of the Joint Programme, Bosnia and Herzegovina was offered an opportunity to comprehensively assess the state of its environment for the first time ever. In order to increase public access to environmental information, the Joint Programme work plan envisioned a state of environment

reporting (SoER) process which is to involve a wide set of stakeholders from different levels of governance, UN partners, civil society and academia.

<u>The initial challenge</u>: government structure of the country, large number of environmental officials over different administration levels, difficult access to many of them and a common practice of not involving all stakeholders into state processes

<u>Operating principles</u>: setting a comprehensive, consistent and efficient consultation and information sharing system with relevant stakeholders, applying foreign experience to local conditions and ensuring public participation throughout the process.

The key result of the lesson on stakeholder involvement is the quality consultative process that made the groundbreaking task of assessing the state of the environment in BiH possible, relevant and comprehensive. This exercise in stakeholder participation has given hope for future all-state, all-inclusive processes which were not so common and successful so far.

It has shown that such inclusive activities such as SoER, while challenging, are clearly feasible and highly valuable in a complex country like Bosnia and Herzegovina.

#### **Local Environmental Action Planning**

The development of Local Environmental Action Plans (LEAPs) has long been held as a viable standard for addressing issues concerning how society affects its environment. Such strategic-planning has been a norm within Bosnia & Herzegovina (B&H) for over a decade, but it has been far from consistent or proceeding at a regular pace. Laws have been established to require their adoption (either at the municipal or cantonal level), but because environmental matters are typically given a low priority in the country (especially in a global economic crisis), unfortunately the actual adoption of LEAPs has been sporadic over the years.

Development of LEAPs is one of the core pillars of the Joint Program, seeking to empower local authorities and other stakeholders with more stream-lined tools/plans to mainstream environmental issues as legitimate priorities and thereafter solve such problems through locally-designed actions, rather than merely waiting for top-down remedies. Furthermore, it is expected that the principles learned in developing a LEAP can be easily multiplied to formulate similar strategic documents, within the municipality, around the country or even to locations beyond national borders.

Out of 142 municipalities in the country (see the map below, under "Products"), only 54 (38%) had already adopted LEAP documents when the JP began, while another 7 (5%) were still in various stages of completion (including 2 which had completed their LEAP documents years before, but were for some reason still waiting to finally adopt them as official municipal strategies). At the start of the JP, this meager state was unfortunately the case, despite clear benefits to be derived from an adopted LEAP (e.g. access to international funds), as well as laws officially on the books requiring all 62 municipalities in one entity, Republic of Srpska (RS), to have already adopted a LEAP by that time – at the time, less than half of RS municipalities had adopted or were in the process of adopting a LEAP.

But looking at the situation from a quantitative perspective does not tell the complete picture. A qualitative view reveals that too few meaningful measures from the adopted LEAPs had actually been implemented either. The most common explanation for this lack of LEAP-realization is a simple lack of financial capacity to implement actions, especially compounded by the global economic crisis, though more so because they were not deemed as budgetary priorities by authorities. However, after analysis of the LEAPs, it was determined that the LEAP process seemed to have been completed as a mere formality, rather than as a step in a longer-term process. Local State of Environment Reports (SoERs) compiled for those LEAPs had many data or analysis gaps, meaning that the subsequently-formulated goals and measures inadequately addressed the true local SoE. In many cases, local ownership of both the problems and solutions was not achieved, as complacent or insufficient stakeholders were often engaged, resulting in a lack of political/societal will to actually implement meaningful and positive change, much less expand LEAP principles to develop more strategic plans for other sectors.

In general, both a lack of will and a lack of funding are to blame for this all-too-common occurrence of "paper plans". In some ways it's not entirely the fault of local authorities. As a country, B&H is still recuperating from the continuing negative effects of the war (politically, infrastructurally, etc.) and is simultaneously still slowly transitioning from a socialist, state-centered model to a more democratic one, seen in the prevalence of overly-bureaucratic institutions, poor democratic governance, low-capacity among stakeholders, apathetic citizens, etc.

On the funding side, there's a global economic crisis which, besides shifting local priorities away from socio-environmental initiatives towards any kind of strong economic growth, it also severely dampens donors' funding opportunities/priorities.

A further point is that in many ways, stakeholders at all levels are somewhat lacking creativity for finding solutions. Local authorities tend to focus too much on large-scale, infrastructure projects. Among the various sectors covered by the LEAPs, there are few low- or no-budget measures envisioned which are truly innovative. But at the same time, few donors are actively encouraging innovation from local applicants.

Unfortunately, all this easily translates into "paper plans".

The clearest means of alleviating the situation was to simply plan for developing more LEAPs in the country. The JP document outlined a goal of another 30 municipal LEAPs to be developed, representing a 49% increase (though a further 7 municipalities were also identified during JP implementation to be included, meaning a total 61% increase).

However, it was not simply enough to increase the quantity of LEAPs, but also to improve their quality and sustainability to avoid creating yet more 'paper plans'. Previous LEAP methodologies used in B&H were analyzed to determine which aspects were functional, which irrelevant and which simply needed improvement. At the same time, other types of strategic-planning processes and methodologies from other regions were investigated to incorporate into the JP's new approach. Furthermore, it was deemed quite necessary to engage diverse stakeholders in a participatory manner in LEAP development, though in the JP document, it was not clearly defined in which manner or to which degree.

For the selection of target municipalities, national stakeholders were consulted for their input, and criteria were developed. Following a several-month desk and field review (compiled in a report, see attached, providing the country's first analysis of municipal SOEs and their capacities/needs for developing LEAPs), the initial 30 municipalities were selected, to cover a spectrum of urban/rural, developed/under-developed, polluted/clean municipalities. It was also decided that two approaches would be taken, based on the fact that 23 had little strategic-planning experience and the remainder had participated in UNDP's recent Integrated Local Development Plan (ILDP) project – the former required active guidance in LEAP methodology, while the latter would be able to develop their LEAP on a shortened timeframe with less guidance necessary.

Experts were engaged to formulate a new LEAP methodology, integrating new approaches, such as DPSIR (Driving Forces, Pressures, Status, Impact, Response), and doing away with somewhat stale, less-comprehensive methods like SWOT (Strengths, Weaknesses, Opportunities, Threats). At the same time, the best of previous attempts in B&H, like the importance of public participation (public questionnaires and presentations, consulting local experts, engaging non-municipal stakeholders as members of work teams/groups...), was particularly emphasized, requesting that municipalities better engage local stakeholders and also that local actors be willing to contribute meaningfully. Such a combination of new and old styles then formed the backbone of a unified methodology that was applied by all JP-engaged consultants to guide municipalities towards their LEAPs – these municipalities were divided into six lots, each lead by a single consulting firm or consortium of firms (see the map below, under "Products").

Utilization of new approaches like DPSIR or a stronger emphasis on public participation required extensive education by the consultants training municipal work teams, and this was achieved with varying amounts of success, largely depending on the degree to which the consultants themselves took to heart the concept of those approaches, or even the idea of capacity-building in general. Some earnestly followed DPSIR principles, while others somewhat reverted back to the old methods they had been using for years; some really took to heart the importance of public participation, while others seemed to regard it as either a way to delay "real work" or just as a mere formality. In either case, it was a challenge to not only convince consultants to earnestly believe in these methods, but also to actually get them to pass it on in a meaningful way to the municipalities, but in the end the JP staff (especially through the help of UNVs stationed in the field) were able to successfully influence consultants and municipalities through continual ground presence.

On the other hand, the active municipal stakeholders themselves had to be willing to absorb the methodology. It became very clear in working with the municipalities the importance of previous experience in strategic-planning. Municipalities lacking experience felt that consultants should be doing more of the work for them, while those who had already done similar strategies clearly were able to figure out most things on their own. This was a situation that seemed to be independent of any kind of urban/rural, developed/under-developed, polluted/clean divide.

The three key ingredients for a municipality to more easily developing its own LEAP are 1) real support from the municipal administration to enact positive change, 2) active non-municipal stakeholders willing and capable to contribute meaningfully 3) an experienced staff led by a confident coordinator.

Lastly, capacity-building trainings for municipal work teams were developed, based on a widespread municipal needs assessment. Besides general education of environmental issues, a strong emphasis was made to facilitate municipalities in two critical, long-term aspects: 1) the integration of long-term planning processes into normal municipal activities, and 2) in appropriately prioritizing their own environmental actions while formulating their annual budgets.

While it is important to see that usage of both the DPSIR and participatory approaches truly does seem to yield better results (more in-depth SoER, more detailed/specific goals/objectives, more comprehensive measures, activation of other actors, greater satisfaction from the community...) than previous methods, as far as this lesson learnt is concerned, the key finding is actually that longer-term planning experience is crucial on all fronts:

- *consultants* must accept that educating others in strategic-planning should not be treated merely as a formality, but as chance for real capacity-building;
- *municipal administrations* must support not only the development of strategic plans, but also the implementation of their actions afterwards, to show they're not just deemed as empty documents;
- *all stakeholders* (especially NGOs and public utility/private companies) must become more engaged in matters important to the community, at the same time building up their expertise to be truly capable of being equal partners with municipalities in decision-making;

municipal staff must become more exposed to strategic-planning principles (including the importance of genuine public participation), so that after several times in similar processes, they are able to realize that a similar approach can be applied to any sector, and thereafter will be able to continue on their own without guidance from consultants or outside initiators like the UN.

The primary evidence found by the JP to support the idea that longer-term strategic-planning is necessary is found in the experience of developing LEAPs within the JP itself. For example, the first 23 municipalities required nine to eleven months to complete the LEAP process, while the 7 selected municipalities that had already completed ILDP beforehand were able to finish their LEAP documents in about four months, because they were already familiar with strategic-planning processes, and had only to fine-tune data collection and goal/measure identification. Of course it was not completely trouble-free, as one municipality had little support from the municipal administration, which translated clearly into an apathetic LEAP work team, though in the end, they finally completed a satisfactory document. Similarly,

there were several municipalities among those 23 with other past strategic-planning experience, and this made them quite obviously very competent to more efficiently develop a LEAP.

Furthermore, as evidence that a long-term approach to strategic-planning is desirable, one should consider that of all 37 JP municipalities, only a single one did not plan any further planning documents within its LEAP for other sectors and sub-sectors (such as energy, agriculture, tourism, waste management, etc.). On the other hand, 10 municipalities do expect to further the planning process in four of the five sectors covered by the LEAPs, and another 3 wish to develop planning documents for all five sectors. Altogether, those 36 municipalities wish to invest over 3,2 million EUR into long-term planning for environment-related sectors; the fact that roughly half of that amount is expected from the local levels themselves is a strong indicator that the municipalities wish to claim ownership of their own planning. This shows that even the municipalities themselves recognize a need for a longer-term programme, whereby each planning document represents a single step towards reaching the community that they wish to achieve.

Another facet of the JP program has already been initiated: the development of strategic-planning documents focused on the energy sector with Sustainable Energy Action Plans (SEAPs) in 5 municipalities, including one that already simultaneously developed a LEAP within the JP.

Furthermore, a few activities already planned within the JP document are being adapted to focus attention on the lesson to be learned, both in terms of highlighting the problems and also in providing municipalities with tools useful for overcoming them. Specifically a national stakeholder (including national and international donors/actors) conference will soon be organized with the primary topics being building up the sustainability of strategic-planning (especially LEAPs) and mechanisms for stimulating the implementation of their measures.

In general, the JP team has found that "showing by doing" is an appropriate approach to ensuring the sustainability of these issues. By highlighting municipalities which are now successfully able to institute planning processes on their own and those which have benefited in capacity and/or funding through such endeavors, it is expected that other municipalities will follow suit.

As a means of replication, one possibility within B&H would be to develop further programmes/projects for identifying other municipalities with any kind of strategic-planning experience and then guiding them through similar processes for defining plans for other sectors (tourism, energy, agriculture, rural/urban, biodiversity...). Another similar possibility is that any municipalities identified as already having achieved a degree of self-reliance in strategic-planning could be engaged in a mentoring program with municipalities lacking such experience. They could serve as role models, and help less-seasoned municipal work teams in the whole process, from finding data sources to navigating legal matters to defining mutual/regional measures to collaborate on.

Even outside the context of B&H, it is clear from this lesson learned that the sustainability of strategic-planning processes, and of LEAPs in particular, needs to be addressed in a way that emphasizes the necessity of linking the development process to the actual implementation. Potential opportunities exist for resolving this issue by stressing the need to municipalities for prioritizing environmental action in their budgets and also by underscoring to higher-level donors/actors the need for them to provide municipalities with funding windows to bridge budgetary gaps they are unable to finance on their own.

Donors have considerable influence to stimulate good practice among municipalities. For example, grants could set a recently-revised LEAP/SEAP as a prerequisite to obtain funding. A similar tactic might be used to incentivize the budget-allocation process: encouraging donors to require applicant municipalities to have developed proven environment-focused lines within their budgets, in order to obtain grants (to a certain degree this JP has already worked in such a direction, as all of its Micro-Capital Grants required 50% local funding).

A concerted effort at coordination among all major donors to revise their funding prerequisites in such a manner (obviously with heavy promotion of such changes and trainings in how exactly municipalities can achieve it – especially with an emphasis on low- or no-budget measures over infrastructure projects) would be a considerable catalyst for local authorities. If they know ahead of time that such a requirement exists, they will begin adjusting their planning activities and annual budgets accordingly as soon as possible in order to ensure that they are not left at a disadvantage for funding windows.

Of course, this will require some synergy with other initiatives (like this JP) to ensure that less-experienced municipalities learn how to develop their own planning documents, in order to avoid a pitfall where all funding continues to flow to the same, more advanced municipalities. It must remain a priority among donors that the neglected/ignored municipalities are not left out, simply because they never received adequate training in proper planning or budgeting practices.

Whatever path might be chosen, it seems relatively clear that the important things are 1) for all municipalities to begin strategic planning and budgeting at some point soon and 2) that repetition (of good practices only!) will make for a more sustainable process in the long run.

Lastly, it should be noted that all of the above points are equally applicable to any other place, whether in the wider southeastern Europe region, or beyond: environmental planning should be integrated into all other planning initiatives, planning documents do require regular monitoring, such documents could/should developed for specific sectors, experienced administrations could/should be more engaged in mentoring their neighbors and project implementation needs to be better integrated into the planning processes themselves.

#### **Energy Efficiency and Renewable Energy Sources in the Public Sector**

When it comes to environmental protection, many have assumed that the ideal approach is through enormous investments in large-scale projects, somehow playing to the idea of "bigger is better". However, it has been shown that such a tactic is not always the best, most efficient and/or most appropriate for every circumstance. With this in mind, this Joint Program (JP) has chosen a different method for tackling energy issues in Bosnia & Herzegovina (B&H). In many circumstances, several smaller-scale projects can have a greater impact as it allows for a decentralization of the benefits (energy savings, health improvements, local economic growth, "green jobs", awareness-raising, etc.) to be spread across the country.

In particular, a multi-pronged approach has been chosen to target various stakeholders differently, with a heavy emphasis on the following sub-sectors: energy efficiency (EE), renewable energy sources (RES) and public buildings. All of these areas have been somewhat ignored at various levels of B&H government, and if left neglected would constitute a significant obstacle to sustainable development, international climate change obligations and even poverty reduction in B&H.

Building efficiency has been deemed a high priority for the energy sector for three major reasons: 1) buildings are responsible for a significant amount of the country's overall energy consumption, 2) their standards of efficiency are quite low and so the benefits of upgrades are high, and 3) a considerable amount of governmental budgets at all levels is essentially wasted on the energy costs of inefficient public buildings.

By introducing a couple of grant windows within the JP for municipalities to implement EE/RES projects, they will be able to consume less energy, therefore being responsible for fewer greenhouse gases (GHGs) and reducing local poverty (through local economic growth and lowered health care costs). Meanwhile, it will of course mean that local budgets are freed up somewhat through the energy savings, and subsequently able to invest in other priorities, thus improving the overall quality of life of their citizens.

At the same time, municipalities have been strongly encouraged to think and act strategically. On the one hand, 37 municipalities developed Local Environment Action Plans (LEAPs) for which energy issues were for the first time given a priority status. On the other hand, 5 of the larger municipalities in B&H were

selected to serve as role models for neighboring towns by creating their own, specialized strategies: Sustainable Energy Action Plans (SEAPs). In the case of both types of plans, it helps municipalities to think and act more in a long-term manner, and therefore to avoid the somewhat haphazard manner in which many municipalities tackled problems before.

Another important approach was to engage not only local actors, but also national and international stakeholders, throughout the JP. National-level authorities were encouraged to coordinate with each other, as well as establish their own mechanisms for stimulating energy reforms at all levels. In the meantime, collaboration with other international agencies was seen to be fruitful, not just in terms of merging available funds, but also in harmonizing future plans for the energy sector to develop a sense of interagency synergy.

The final important method was one of sustainability being incorporated as much as possible. An Energy Management Information System (EMIS) was set up whereby each local EE/RES measure could input its data into a database, whose purpose would be to provide country-wide energy data for stakeholders to utilize, as well as highlight best practices for localities wishing to replicate these EE/RES projects on their own.

The fact that locals themselves are the ones maintaining this system might be cause enough to declare it a success, but even more significant than that is the fact that local municipalities co-financed their own projects. It might seem a somewhat benign point to highlight, but not only was their total contribution even larger than the JP's to these EE/RES projects, but in the B&H context it's practically revolutionary that local-level actors are categorically claiming ownership of energy issues.

The main objectives of this activity are to reduce fossil fuel usage, decrease CO2 emissions and reduce energy costs that would ultimately also result in public budget savings. The objectives are reached through the introduction of EE/RES measures into public sector buildings, as well as increased awareness and knowledge among the primary stakeholders within local communities. A side benefit of this activity is the general promotion of EE/RES to the public, which therefore might indirectly encourage higher efficiency standards for new buildings (perhaps through upgraded building codes) and creatie sustainable demand among B&H citizens both for EE/RES measures and the improved capacities of those able to provide such services.

While regional/global initiatives and trends in the field of environmental protection and climate change are more and more focusing on EE/RES opportunities, in this regard, B&H is unfortunately still not improving sufficiently and there remains very little progress on these issues in general, nor adequate efforts from local authorities and other stakeholders to mainstream these issues in a comprehensive manner which factors in longer-term perspectives.

The latest studies and analyses show that energy consumption within the building sector (residential, public and commercial) in B&H comprises 57% of the country's total energy consumption, while in the EU this rate for buildings is as low as 40%. Clearly, there are standards in place in the EU that result in much lower energy consumption in buildings when compared to those in B&H.

International experience shows that EE improvements for buildings can save up to 30% of their energy usage in a typical case, and it is safe to assume that in B&H the energy saving potential is even greater considering the low-efficiency baseline currently found. Based on the scarce data available, the estimation is that B&H suffers significant economic and environmental losses because of the low EE standards found in both private residential buildings and in publically-managed buildings and facilities, which typically have very high expenditures on heating, water, air conditioning, lighting, etc. At the same time, citizens and decision-makers are not even sufficiently aware of the situation, nor equipped to properly control or manage these costs more efficiently. If one takes into consideration the low GDP of B&H, such inefficient use of energy runs directly counter to any of the country's poverty reduction efforts, not to mention those initiatives by UN or similar agencies.

To date B&H has relied on two major RES – hydropower for electricity generation and biomass for heating, with wood being used as the primary fuel, though only in its traditional forms (fireplace, small

furnaces, etc.). Available RES potentials, such as geothermal, solar, biomass (including from waste) and wind have not been significantly explored, except in small-scale settings, and unfortunately there are no high-level strategies or plans to change this state of affairs.

The power sector in B&H now consists of three vertically-integrated monopolies: Elektroprivreda B&H, Elektroprivreda Hrvatske Zajednice Herceg Bosna and Elektroprivreda of the Republic of Srpska. These power companies are synchronized and interconnected, but there is no competition among them, since they are allowed to function as virtual monopolies within their exclusive, ethnically-based territories.

In order to provide services without breakdowns, the three companies established a Joint Power Coordination Centre (JPCC) to coordinate the work of three power transmission systems, whose ultimate goal is to establish full operation of the 400kV grid and synchronize it with the western European grid and EU systems.

This is the only form of cooperation between the service providers. When it comes to chances to connect other types of RES systems to the grid, so far there are no legislative or technical possibilities which are both feasible and practical. For example, a few small hydro power plants built by private investors are still waiting to be incorporated into system, years after they were completed. When it comes to solar power plants, it practically becomes an impossible mission to achieve, primarily due to lacking legislation.

In general, not only are policies missing in relation to these issues, but also experience remains inadequate among the three service providers to deal appropriately with innovative, alternative options of this kind. Since there is a lack of national strategies/plans, several of the more progressive municipalities have decided to link up with European initiatives for which they do not require approval from higher levels in the system. Two of those are the signing of the Covenant of Mayors Agreement (by which a municipality unilaterally pledges to increase its own EE by 20%, reduce its CO<sub>2</sub> emissions by 20% and expand its RES usage by 20%) and the creation of local-level SEAPs.

The JP directly supported the creation of SEAPs in 5 municipalities, 1 was separately supported by UNDP, and several have been supported by the German development agency Gesellschaft für Internationale Zusammenarbeit (GIZ). Meanwhile there are also some other municipalities trying on their own to develop SEAPs without outside facilitation or support, but so far there are no results or completed SEAPs reported, which indicates that, in this field, more support to municipalities should be provided if any sense of sustainability is to be engrained.

Considering all the above, the JP, as part of wider efforts in the promotion of EE/RES in B&H, aims to identify and support a number of innovative pilot projects within the field of EE/RES in public buildings.

The primary goal is to directly contribute to the development of capacities among local and national stakeholders in the fields of environmental protection, EE and RES, and also to practically demonstrate to institutions, local authorities, individual users and other relevant stakeholders the benefits of applying EU-approved EE standards and modern energy management practices in public buildings (EU standards are typically the archetype aspired to across this region, because they tend to be the most immediate, progressive model to look towards, while at the same time countries such as B&H wish to join the EU and therefore would be eventually required to meet such standards anyway).

A focus on public sector infrastructure (including schools, universities, health facilities, administrative buildings, cultural heritage sites, public lighting systems, etc.) represents also the greatest potential for the reduction of GHGs as the global building sector has been found to contribute 74% of countries' GHG emissions worldwide. Therefore any improvements in public building EE will drastically help B&H achieve its international climate change obligations, as well as achieve significant economic benefits for the country, public sector, private businesses and even individuals.

By implementing the planned set of pilot EE projects, by the end of 2012, the JP, in coordination with its partners, will be able to present to B&H public and authorities a portfolio of about 30 completed EE/RES

pilot projects. The projects are diversified both in terms of the types of buildings/facilities they target and their locations being spread all across B&H, from small towns to larger cities.

The projects clearly demonstrate the added value of investing in EE. With environmental and financial results being carefully recorded and compared with baseline data, this kind of a systematic approach enables clarity in measurements and calculated benefits for each of the individual projects. All of this data is being inserted into EMIS, whose purpose is to concretely show the statistical benefits of EE/RES measures, as well as to estimate more accurately the gross potential for energy saving in similar buildings/facilities across B&H.

In the end, these 30 visible and feasible projects provide critical examples to show other municipalities that similar solutions can be simply replicated. To a large degree, this is due to a diligent selection process at the beginning, focusing on building types found in any municipality requiring realistic, cost-effective technical solutions that are affordable and easily replicable.

These projects have been financed through two separate JP funding windows targeting municipalities that have developed SEAPs and/or LEAPs – though most LEAPs developed before the JP lack an emphasis on EE/RES components, the JP required that all 37 of the LEAPs it supported include such measures: Innovative Grants (IGs) and Micro-Capital Grants (MCGs). IGs tend to support larger investment projects, and in most cases merged funds with both international and local donors to maximize efforts and results. MCGs, on the other hand, helped finance smaller concepts, with local donors providing co-financing. In both grant cases, the contribution of funds from local budgets fostered a true sense of ownership that will help ensure sustainability of EE/RES in the country.

The team identified all relevant and possible actors (e.g. other potential donors and target municipalities). Municipalities with an apparent progressive approach in regards to environmental protection and EE/RES were given priority in the selection process. The result of such criteria was not limited to larger or higher-budget municipalities, but also smaller/lower-budget towns where it was clear that the authorities showed significant progress in terms of environment protection.

To a large extent, these forward-thinking attitudes were deemed necessary in order to stimulate a diversity of EE/RES concepts. To be sure, there were plenty of more "classic" activities dealing with repairs of existing infrastructure (e.g. walls, windows, doors, roofs, furnaces, etc.), but such actions were only the necessary foundation for pursuing more advanced measures: thermal façades, roof insulation, EE windows/doors, thermal solar collectors, biomass furnaces, LED public-lighting, etc. While some of these might not seem extremely sophisticated to many Western minds, that B&H authorities now consider them as real local priorities, much less contributed more co-financing (42.6%) than the either the JP itself (39.8%) or other donors (17.6%), is a fairly revolutionary notion for the country.

Furthermore, there will be a solid foundation for determining project success and actual budget savings. Since all projects had to undergo energy audits at the beginning, all relevant parameters can and will be followed up. While the energy audits provided baseline data and predicted both the expected savings (monetary, energy, CO<sub>2</sub>, etc.) of the measure and a payback period (when the investment "pays for itself"), the installed monitoring systems and trained local personnel will continue to verify energy consumption in the future. Finally, because this data is expected to be input into EMIS, it will provide a substantial resource for other stakeholders at all levels to determine which kinds of EE/RES measures would work best for their own circumstances.

All activities have been closely coordinated with and monitored by representatives of all involved stakeholders, be it cooperation with local authorities/CSOs/end-users, consultation with national-level ministries/funds or collaboration with international actors to overcome funding gaps. Such a methodology has proven very fruitful to all parties, and in particular has proven to be an excellent means of problem-solving (e.g. a frequent lack of blueprints for old/war-devastated buildings) with a plethora of ideas for solutions put forward.

The greatest impact achieved by the JP through the implementation of its EE/RES activities is that it has truly initiated the process of mainstreaming EE/RES in a meaningful way. Whereas before the JP, few in B&H dealt with the issues in any kind of a systematic way (the only real action was done only at higher levels and often in a somewhat uncoordinated manner), now the most important actors at all levels are finally playing a role and taking responsibility for the sector. Significant steps forward have been made by the JP in mobilizing B&H government organs and other stakeholders to ultimately claim ownership both of the consequences from and solutions for the energy sector.

They are now extensively aware of the fact that progress in the public building sector in particular is crucial to better protect the environment, reach climate change goals, improve public health and achieve poverty reduction through budget savings for governments, businesses and individuals. Some of the exact savings have been summarized in the table below, as well as linking those savings to the investments made both by donors and the locals themselves:

Total investment value (38 projects) - USD	3,800,000
Annual savings in public budgets - USD	660,000
Average return on investment - Years	5.8
Annual CO2 reductions - Tonns	2,200
Direct beneficiaries	359,700
Indirect beneficiaries	1,917,900

But these results are not the only results for this particular activity. Through impmenentation of Energy efficiency measures and introduction of renewable energy sources, only through direct works on buildings **664 men/months** of engagements was created which is in money equal to nearly **500,000 USD of salaries** for Bosnia and Herzegovina people.

One of the key points that such data makes abundantly clear is that EE/RES measures make an unambiguously positive contribution to reducing poverty in the region. This remains true in several respects, whether one considers merely the monetary aspect of the municipalities and individuals spending much less of their budgets on energy costs, but also in the associated  $CO_2$  reductions, which will decrease costs related to both environmental clean-up and health care from air pollution. One should also not neglect to mention the potential of green jobs, namely economic growth and increased employment as citizens and other municipalities demand that new service providers fill the niche of a developing EE/RES market or as the municipalities can begin to promote themselves as eco-tourism havens due to their cleaner air and environment.

Furthermore, it has been shown that the implementation of such visible EE/RES projects forms an important component of a comprehensive energy program. At the same time as these measures, the JP also dealt with energy issues on several other fronts, having stimulated the creation of SEAPs, encouraging municipalities to tackle the energy sector within their LEAPs, creating a country-wide database with EMIS and finally establishing a Designated National Authority which brings together for the first time higher-level ministries to work on climate change issues – potentially their cooperation could serve as a positive model for similar national commissions of other sectors (EE/RES, water, waste, environment, health...).

The JP's multi-pronged approach has already achieved obvious results, particularly among local stakeholders, who seem to have finally awakened to the potential role they can play in energy issues. A few pertinent examples come to mind which illustrate well the positive example the JP has served in promoting EE/RES at the local level:

- 1. During the second round of calls for MCGs, over half of the CSOs' submitted proposals dealt just with the EE/RES sector, and furthermore, that municipalities in all cases were more than willing to co-finance such measures, showing that local authorities also see value in the EE/RES sector. These two facts represent a relative groundswell of support from the bottom-up and is a trend which is expected to only increase over the coming years.
- 2. Analysis of the JP's LEAPs shows that 78% of the JP municipalities deem energy to be a priority issue and have together budgeted over 34 million EUR (or 14% of the total from all 37 LEAPs' budgets) to implement EE/RES, climate change and air quality measures. Such statistics should be compared to the previous state of affairs, mentioned above, that LEAPs very rarely had any energy-related content at all. This situation shows that many have already taken the lesson to heart that it is important to strategically plan out energy solutions in a methodical manner, rather than simply implementing a few projects haphazardly without any sort of a longer-term perspective, as has largely been the case before now.
- 3. The EMIS system has already proven to be a sustainable concept, as municipal personnel continue to verify data input, or in some cases, even add new entries to the database by integrating data from new public facilities which had not been covered by the JP. Furthermore its very existence provides an archive of evidence showing the real-world benefits (project investment, monetary savings, CO<sub>2</sub> reductions, payback period...) to be gained from EE/RES actions, such as those in this JP, and it attests to the viability of such an approach to these issues.

The first steps are to complete those remaining EE/RES grant projects still under implementation or in the pipeline (all MCGs planned to finish by the end of October 2012 and all IGs by the end of 2012 or in the spring of 2013). In the meantime, these energy-centric concepts will be promoted wherever possible, including at special events held for each MCG, IG and SEAP completed, as well as at a LEAP-centered conference in late autumn of 2012.

As mentioned above, EMIS input is on-going, though the long term plan remains the same: to provide all B&H municipalities with this software so that they can integrate all their public buildings and facilities to the central system. This will provide a comprehensive dataset for monitoring country-wide energy consumption trends, but also encourage future EE/RES efforts in both the public and private sectors as various stakeholders are able to see concrete proof portraying the benefits to be gained from mainstreaming EE/RES measures.

Meanwhile, it should also be noted that a few important observations were made during the implementation of these EE/RES measures that should encourage follow-up action on the part of UN or other agencies, as well as national/local actors. For one thing, it's clear that many older buildings cannot easily be repaired or retro-fitted with EE/RES techniques, usually due to improper design/construction from the socialist period or even damage from during the war; such buildings realistically require drastic renovation and/or in-depth, site-specific energy plans to determine how best to improve their EE characteristics and RES potential.

On the other hand, many of the local stakeholders came up with quite innovative ideas that should be pursued further (e.g. expanding efficient LED lighting beyond streets to include buildings/monuments, taking advantage of some areas' thermal springs by introducing heat pumps, etc.); unfortunately these progressive ideas were not able to be explored to the necessary extent during the JP timeframe, but they still merit inclusion in future actions from UN or other agencies.

The concept of replicability was built into the JP from the beginning. One example mentioned previously was that an important criteria in selecting the EE/RES grants to be implemented was the extent to which a proposed facility could serve as an appropriate example either for other buildings in the same municipality or for similar buildings in other municipalities. Also the methodology for creating strategic documents (SEAPs, LEAPs, etc.) has been formulated in a way that the approach could be applicable to any other location (within B&H or beyond) with the willingness to act in a progressive manner towards environmental and energy issues.

Experience in the JP has already begun to show that this strategy for replication should prove quite successful. In several cases, municipalities and CSOs that were not even included in the JP have come forward seeking advice in developing their own SEAPs and/or LEAPs, wishing to incorporate their own public buildings within the EMIS system (itself a lesson adopted from UNDP Croatia's experiences) and/or implementing similar EE/RES measures as the JP's IGs and MCGs in their own towns. This clearly shows the adoptability of such endeavors all across B&H, or even to other countries for that matter.

Though EU integration remains a strong motivation for much of the national interest in EE/RES, the majority of the local will behind this can be more readily attributed to desires for local financial security (and in a few cases, environmental protection and/or health concerns). Such an emphasis on monetary benefits is likely to be quite applicable to any locale around the world, though obviously the ability to take advantage of EU aspirations is a "carrot on a stick" that is only a valid tool for a few countries.

The only factor that really seems to remain uncertain is concerning the financial investment necessary to ensure success and sustainability of these approaches. Luckily, local authorities in B&H have already shown a ready willingness to co-finance such initiatives (itself a strong testament to assertions that they have claimed ownership), but there still remains a large gap to be filled by outside donors for the funding that local levels simply are unable to afford; the LEAP analysis mentioned above reveals that municipalities in the country still require 74%, or just over 25 million EUR, to successfully realize their energy-related programs.

Clearly such a large amount of money is beyond the budget constraints of B&H municipalities amidst all their other responsibilities, not to mention the global economic crisis' effects on a country still emerging out of socialist stagnation and recovering from war damage. Therefore, it remains firmly in the hands of national authorities and the international community to continue cooperating with each other to build up synergies of funding that can efficiently bridge this budgetary gap. But at the least, this JP has shown that though the required investments are large in total, these are not the large-scale projects of past times. These are "anywhere" kinds of projects which, though on a smaller scale than large power plants or transmission grids, still can provide, in just about any location, the same or better end results through the "negawatts" (from the "negative megawatts" of energy saved) they generate via EE/RES savings.

There is a set of publications of 7 booklets on the topic of EE/RES in the public sector, which is especially meant for students: <a href="https://www.undp.ba/index.aspx?PID=7&RID=752">www.undp.ba/index.aspx?PID=7&RID=752</a>.

#### b. Report on any innovative development approaches as a result of joint programme implementation

The concept of green economy was introduced in the national dialogue and developmental agenda for the first time during the JP implementation, with a prospect of becoming a major contribution to future policy making for energy and agriculture sectors.

During the implementation of the programme, it was recongized that approximately 3,000 returnee families to rural areas of Bosnia and Herzegovina live without electricity – no electrical grid. Most of them returned on average 10 years ago and are still waiting for electrical grid to come to their villages. Most of them will wait from 5 to even 30 years for this to happen. The programme recongized this problem and supported 12 families with Photovoltaic and solar hot water individual kits to overcome these problems and support sustainability of ther lives in such remote communities accross the country. In parallel, UNDP prepared and together with it's UK NGO "NESTA" lounched a global challange "Renewable energy challange" to seek for best techno-economic innovative solution for BiH problem but with potential to replicate globally. First results are that 37 solutions are received, 4 shortlisted and will send their solutions for BiH for field testing and upon completion, winning solution will received reward and UNDP will install up to 50 of these sets in Bosnian and Herzegtovina rural areas, supporting one of the most vulnerable population in the country. This is another example how energy and environment can be linked to poverty reduction, social inclusion and other social and/or developmental activities/projects.

- c. Indicate key constraints including delays (if any) during programme implementation
  - a. Internal to the joint programme
  - b. External to the joint programme

c. Main mitigation actions implemented to overcome these constraints

Comment: There were no significant delays in programme implementation.

- d. Describe and assess how the monitoring and evaluation function has contributed to the:
  - a. Improvement in programme management and the attainment of development results

Regular tracking of programme progress, obstacles and sound decision making for appropriate changes to be incorporated

b. Improvement in transparency and mutual accountability

Each agency had its own set of targets to achieve and indicators to follow and report on to. Through regular reporting progress has been shared among agencies and PMC that guaranteed transparency and accountability.

c. Increasing national capacities and procedures in M&E and data

Through almost each activity within the programme, national stakeholders were introduced with importance of M&E, measuring progress and sharing results with wider public.

d. To what extent was the mid-term evaluation process useful to the joint programme?

Mid-term evaluation was very useful to the joint programme, especially in terms of making adequate changes for improving second phase of the programme.

- e. Describe and asses how the communication and advocacy functions have contributed to the:
  - a. Improve the sustainability of the joint programme

All of the activities in communications and advocacy aimed to promote the partnership with the respective local authorities to increase the sensitivity of the ownership over the project activities and its results. The local communities were encouraged to identify (within their respective budgets) priorities on which the savings (created by the EE projects) could be used. The Return on Investment was elaborated in each case along with the message that investment in energy efficiency is smart investment that pays off. All of the promotional materials aimed to increase interest of municipalities and authorities countrywide in expanding the number of the EE projects, to use our activities as a role model to develop their own.

b. Improve the opportunities for scaling up or replication of the joint programme or any of its components

Special short videos were produced on top of the news stories broadcasted by major TV stations countrywide. In each of the promotional events related to 38 implemented projects, JP clearly explained that these are not complex, yet extremely effective activities and EE measures that can help all municipalities and cities countrywide to manage energy consumption and create savings in both energy and money. During the 2012 alone, JP was the most reported activity within the UN agencies' work on energy efficiency and environment.

c. Providing information to beneficiaries/right holders

In more than 12 PR events, all of the press releases, 8 e.newsletters, 10 factsheets, 2 infographics and all other relevant promotional materials JP provided clear and understandable information, serving as both the educational and promotional channels/tools. Two infographics were produced

with the specific purpose of elaborating the complex issue of using the LED vs. common lights and decrease of the CO2 and GHG emission. More than 400 news reports on JP's activities were published by electronic and print media countrywide.

Special facebook page aiming to attract young audience has been created at the beginning of the Joint Programme, through which JP provided more than 350 news items directly related to the JP and environmental and energy efficiency measures.

- f. Please report on scalability of the joint programme and/or any of its components
  - a. To what extend has the joint programme assessed and systematized development results with the intention to use as evidence for replication or scaling up the joint programme or any of its components?

Most of the activities have been developed and implemented with intention of scaling up and replication. The idea of replication and scaling up was incorporated in every step of programme implementation, wherever possible.

b. Describe example, if any, of replication or scaling up that are being undertaken

Innovative grants, pilot projects that were funded through this funding window, focused on energy efficiency and renewable energy sources in public sector with intention to improve energy efficiency of public buildings/infrastructure in typical buildings like cultural center, school, public lighting etc. By doing this, and showing the results through many PR events, municipal energy days etc. the programme intended and succeeded to convince other public building management to introduce the principles of ee/res in their own buildings/infrastructure. Besides this, the programme also introduced energy efficiency and renewable energy sources into local planning and further expended to cantonal where now two cantons have started developing their own Energy management strategy focusing on EE/RES in public sector.

c. Describe the joint programme exit strategy and asses how it has improved the sustainability of the joint program

Exit strategy is mainly focusing on further strengthening and scaling up of achievements on local to higher levels as well as dissemination of results and achievements on national level down to entity, cantonal and local level. The focus will mainly remain at Energy efficiency and renewable energy sources in public sector as one of the main opportunities for communities to link environment and poverty reduction, creating environment for sustainable development through financial savings, creation of new jobs and whole new economy.

#### IV. FINANCIAL STATUS OF THE JOINT PROGRAMME

- a. Provide a final financial status of the joint programme in the following categories:
- 1. Total Approved Budget 2.Total Budget Transferred 3. Total Budget Committed 4.Total Budget Disbursed

Total Approved Budget: 5,499,864

Total Budget Transferred: 5,479,863 (20,000 for formulation transferred prior to programme start)

**Total Budget Committed:** 

Total Budget Disbursed: 5,499,863 (as reported by the agencies, to be confirmed within upon closure of June, 2013)

b. Explain any outstanding balance or variances with the original budget

# V. OTHER COMMENTS AND/OR ADDITIONAL INFORMATION

# VI. CERTIFICATION ON OPERATIONAL CLOSURE OF THE PROJECT

By signing, Participating United Nations Organizations (PUNO) certify that the project has been operationally completed.

PUNO	NAME	TITLE	SIGNATURE	DATE
			2-0-1	

Office of the UN Resident Coordinator	Yuri Afanasiev	United Nations Resident Coordinator	
United Nations Development Programme / United Nations Volunteers	Zahira Virani	Deputy Resident Representative	
United Nations Environment Programme	Jan Dusík	Acting Director and Regional Representative UNEP – Regional Office for Europe	
Food and Agriculture Organization of the United Nations	Tony Alonzi	Officer in Charge, Regional Office for Europe and Central	
United Nations Educational, Scientific and Cultural Organization	Siniša Šešum	Senior Programme Officer Head of Antenna Office in Sarajevo UNESCO Venice Office - BRESCE	

# VII. ANNEXES

- 1. List of all document/studies produced by the joint programme
- 2. List all communication products created by the joint programme
- 3. Minutes of the final review meeting of the Programme Management Committee and National Steering Committee
- 4. Final Evaluation Report
- 5. M&E framework with update final values of indicators