STRATEGIC EVALUATION ON ENVIRONMENT AND RISK PREVENTION UNDER STRUCTURAL AND COHESION FUNDS FOR THE PERIOD 2007-2013


National Evaluation Report for Hungary

Executive Summary

Directorate General Regional Policy

A report submitted by

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EXECUTIVE SUMMARY – ENVIRONMENTAL INVESTMENT PRIORITIES IN HUNGARY

1.1 PART 1: CURRENT SITUATION

1.1.1 State of the environment

Water supply
Establishment of water networks has almost reached the possible maximum. There are clearly tasks in the field of water quality improvement. The parameters exceeding limit values of the supplied drinking water (arsenic, nitrite, boron, fluoride and ammonium) have effect on 25.1% of the population and 871 settlements.

Waste water treatment
In 2004, the public utility gap was 31.5%, which means that waste water collection considerably lags behind public utility water supply. Consequently in this field there are considerable network enlargement tasks. Lagging was even larger in the field of waste water treatment.

This is why the National Municipal Wastewater Sewerage and Treatment Implementation Program is an environmental program of high cost claim. In Hungary, the number of households connected to the sewerage system was only 62.2%; the ratio of biologically treated communal wastewater increased to 66.5% by the end of the year 2004. For the time being there are plans just for large systems for regional networks, the Individual Wastewater Treatment National Implementation Program hasn't been started - even in 2005 - yet.

Municipal solid waste
Today, the typical manner of disposal is landfilling (~83%). In the framework of public services, 452 landfills operate with permission in 2004, of which only 30% meet the requirements of a modern landfill site. In addition the estimated number of abandoned closed down or illegal waste dumps are over 2000 in Hungary.

Based on the current information the rate of citizens able to access selective waste collection will reach the expected 50% by the end of 2005. The recycling and recovery rate of 835 thousand tons of packaging waste has also reached the 50%.

At present the main goal is to develop complex regional collection-treatment systems. Accordingly the prevention and real utilisation lags behind. These solutions mean development of oversized landfills which require a lot of technique and energy but few manpower.

Renewable energy
It is necessary to develop the utilization of renewable energy resources, paying particular attention to the utilization of renewables in power generation in order to reduce dependence on imports and environmental damage in line with the EU and Hungarian objective: renewable energy resources in the total use of primary energy resources should be increased to 6% by 2010. At present the proportion is 3.6%.
Natural risk management
Establishment of flood control system along the Danube proved satisfactory. However in the Tisza valley the establishment for standard flood level determined in 1976 hasn’t been finished yet, primarily in the Upper-Tisza area, but in the Middle-Tisza area there are some underfulfillments as well. Here the barrages must be repaired too. For management of the flood control problems of Tisza valley the program called Improvement of Vásárhelyi Plan has been initiated.

In Hungary the forest fire problem is not very significant and it isn’t the part of the environmental protection programmes.

Until the present day, there have been several measures taken by both governmental and non-governmental organizations to mitigate the harmful impacts of drought in Hungary. However, in most cases, those measures have been sporadic and inadequately consolidated. Most of the measures have been reactive rather than preventive, and the actions have had partial effects Attitude towards drought mitigation actions should shift from the crisis management type of actions to risk management.

1.1.2 State of implementation of the acquis
The legal harmonisations have been fully accomplished. There is no time-lag endangering the fulfilment term. There is a program, which implementation has been started a bit later than it should have been necessary (Drinking-water quality improving program), that is why fulfilment of 2006 and 2009 terms need more effort.

One major concern in pointing out priority measures for the Hungarian operational environmental policy is derived from the derogations based on the agreed text on the accession treaty between EU and Hungary.

More information can be found in Chapter 2.

1.1.3 State and history of environmental expenditure
The following table outlines structural assistance in environmental protection for the period 2000-2006.
Table 0-1: Structural assistance (2000-2006), in millions of EUR, at constant prices, state price base

<table>
<thead>
<tr>
<th>Objective 1</th>
<th>Objective 2</th>
<th>Objective 3</th>
<th>ERDF</th>
<th>EAGGF</th>
<th>Cohesion Fund</th>
<th>All Structural Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13. Promoting the development of rural areas</td>
<td>1308. Agricultural water resources management</td>
<td></td>
<td></td>
<td>17,869</td>
<td>17,869</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1312 Protection of the environment in connection with land, forestry and landscape conservation</td>
<td>4,297</td>
<td></td>
<td></td>
<td>4,297</td>
</tr>
<tr>
<td></td>
<td>33. Energy infrastructure</td>
<td>332 Renewable sources of energy (solar power, wind power, hydroelectricity, biomass)</td>
<td>9,099</td>
<td></td>
<td></td>
<td>9,099</td>
</tr>
<tr>
<td></td>
<td>34. Environmental infrastructure (including water)</td>
<td>343 Urban and industrial waste (including hospital and dangerous waste)</td>
<td>17,685</td>
<td></td>
<td>176,537</td>
<td>194,222</td>
</tr>
<tr>
<td></td>
<td></td>
<td>344 Drinking water (collection, storage, treatment and distribution)</td>
<td>10,778</td>
<td></td>
<td>5,899</td>
<td>16,687</td>
</tr>
<tr>
<td></td>
<td></td>
<td>345 Sewerage and purification</td>
<td>32,336</td>
<td></td>
<td>512,275</td>
<td>544,611</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Environmental infrastructure</td>
<td></td>
<td></td>
<td>19,187</td>
<td>19,187</td>
</tr>
<tr>
<td>Technical Assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,923</td>
<td>1,923</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td>78,492</td>
<td>17,869</td>
<td>715,821</td>
<td>812,182</td>
</tr>
</tbody>
</table>


1.1.4 State, history and lessons of funding

Concerning the protection of the environment and its contribution to regional development in the period of 2000-2006 mainly infrastructural improvements were conducted in line with environmental requirements, aimed at bringing the quality of life within the society closer to the EU average and ensuring equal conditions of competition for business organisations:

The experience gained during the preparation and execution of ISPA projects (waste water and waste projects, period 2000-2006) shows that implementation has been, however, rather slow and difficult, in particular in the environment sector. Slow progress in implementing ISPA projects has been mainly due to the lack of technical preparation and poorly prepared tender dossiers.
The results and sustainability of the Phare program, according to independent EC experts’ evaluation, is a high and important contributing factor to the adoption of the acquis. Of high importance among the Phare HU980702 is the institution building programme, which strengthened the Central Environmental Protection Fund (now the Environmental Protection Fund Guidance –EPFG). The EPFG project develops institutional capacity necessary for the implementation; and provides co-financing possibilities for waste water and solid waste management according to EU standards. Currently it is not clear which ministry (Economy or Environment) is in charge of co-ordination of renewable energies’ support mechanism. This situation is quite regrettable concerning the programming tasks of preparation for the 2007-2013 period. Due to this the National Development Office, which is coordinating structural and cohesions funds program implementation on national level, initiated a comprehensive study to be elaborated to support those who will carry out programming documents.

There are not enough “risk projects” under implementation (no ISPA experiences) to give an insight on past programming. Regarding flooding, competence on planning and execution of measures is well settled both on national and international level. The establishment of the National Drought Commission is underway which should serve as an interdisciplinary and inter-ministerial organisation for co-ordinating the implementation of the forthcoming National Drought Strategy in Hungary. Forest fires are not a great risk in Hungary.
1.2 PART 2: NEEDS FOR 2007-2013

1.2.1 Investment needs

Water supply

In Hungary, practically all settlements have mains water supply with 98% of the population supplied with water. The subsequent reconstruction demand of present establishments and new extensions must be covered basically from fee incomes in harmony with theory of total cost recovery.

There are tasks in the field of water quality improvement. A part of deep aquifers used for drinking water supply contain greater concentration of natural materials (arsenic, boron, organic material, ammonium, iron, manganese) in drinking water than permissible. This issue is addressed in the Drinking Water Quality Improvement Program. The implementation of that program has started later than it should have been, that is why the fulfilment of 2006 terms is impossible and reaching the 2009 deadline will need more effective effort.

Waste water treatment

The most important problem for Hungary is in the field of STP’s: waste water collection and treatment fail to comply with EU norms. Therefore the missing sewage network and STP's still have to be built. The UWWT Programme focuses on the development or upgrading of sewage network, waste water and sludge treatment plants for agglomeration with pollution load above 2,000 PE. With the help of EU and Hungarian funding the technical connection to a WWTP will be provided for 87% of the inhabitants in 2015 instead of the present 62,2%. In settlements with collector system and on sensitive areas the ratio of treated waste water will increase to 100%. The National Municipal Wastewater Sewerage and Treatment Implementation Program is an environmental program of higher cost claim.

The existing public utility network and wastewater treatment facilities are obsolete or worn out. Consequently, the capacity of wastewater treatment plants and the efficiency of treatment technologies do not comply with basic criteria at many locations in Hungary. Most facilities need refurbishment, and many need complete replacement of infrastructure.

The implementation of Individual Wastewater Treatment Program is important in the settlements, part of the settlements, areas, where a collecting system is not justified either because it would produce no environmental benefit or because it would involve excessive cost. The Individual Wastewater Treatment National Implementation Program hasn’t started yet.

Municipal solid waste

At present the main goal is to develop complex regional collection-treatment systems. Accordingly the prevention and real utilisation lags behind. However there will be no more practice of 'one settlement, one garbage heap' which wasn’t a good practice, but the solutions mean development of oversized landfills which require a lot of technique and energy but few manpower.

By ISPA and one CF (Szabolcs-Szatmár-Bereg County) projects 40% of the Hungarian population will be served by EU-conform integrated MSW management. Based on the current information the rate of citizens able to access selective waste collection will reach the expected 50% by the end of 2005.
For the future there are key issues, priorities, which have to be continued and/or developed:

- Recultivation of old, closed landfills,
- Implementation of complex, regional waste management systems,
- Implementation of small regional (NUTS-3-4) projects (related to needs of smaller communities),
- Establishment of selective waste collection systems,
- Development of kerbside selective waste collection,
- Implementation of waste prevention programs (e.g., home composting),
- Additional investments for formerly accepted programs (mechanical-biological treatment, expansion of waste yards (recycling centers)),
- Additional investments serving more regions’ waste management systems (thermal recovery, incineration),

The **recultivation of old landfills** is a serious and urgent task and it can be seen that the municipalities **don't have financial sources** for this purpose, while the groundwater and soil is getting seriously polluted at many sites (more than 2000 sites are not yet recultivated).

**Renewable energy**

A total of 386 MW new capacity in RES is estimated, of which **wind energy** (330 MW) and **biomass** (30 MW) form the most important part.

There is however no clear judgment on the need of funding, depending on private investment and feed-in tariffs. Earlier documents mention that investment funds should focus on PV, hydro and biogas; while the new Environmental Operational Program for 2007-13 taking shape in these days does not intend to exclude any technologies of renewables.

Strategic documents do not take into consideration such benefits (cost savings) of renewables like avoidance of environmental impacts and of health harms, possible economic advantages and sources of incomes.

**Natural risk management**

In the recent years, **floods** on the river Tisza directed the attention to reconsider the functioning of the present flood control system, with the revelation of the possibilities concerning flood reduction and catastrophe storing. Within the framework of the programme for „The Improvement of Vásárhelyi Plan” the rehabilitation of the transport ability of high waters in Tisza valley is realized, including an adequate **flood-plain arrangement**, the construction of a flood storing system, the strengthening of critical lengths in the Tisza valley flood protection system, the rehabilitation of the flood plain river-system and the development of farming.

Besides the two main rivers (Danube and Tisza), flood protection developments also deal with other rivers. The necessary developments include the **improvement of state property first-class flood control structures** (thus for example Körös valley, Lower-Dráva, Zagyva-Tarna, Hernád valley) as well as the improvement of self-government structures. The defence capacity of nearly two thirds of the self-government embankments (65%) is not adequate, thus needs improvement and strengthening.
The government does not plan to place the open flood plains under protection, where it is not necessary, but intends to „give back the land for rivers”, where it is possible. Hungary, being situated in the bottom of the Carpathian basin has to face major floods along her principal rivers, most of them generated abroad, in the upper river basins. The importance of flood control as a key prerequisite of social and economic development has been recognised early in Hungary.

1.2.2 Summary of investment needs

The table below summarises the needs highlighted by the country report. The table gives the total financial estimate of the need per field and, whenever possible, a financial estimate of the overall cost of each type of investment.
### Table 0-1: Financial estimate needs requiring further planning and/or investment in 2007 – 2013

<table>
<thead>
<tr>
<th>WATER</th>
<th>WASTE WATER</th>
<th>WASTE</th>
<th>RES</th>
<th>NATURAL HAZARDS</th>
<th>OTHER AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.121 Meuro</td>
<td>3.738 Meuro</td>
<td>1730 Meuro</td>
<td>1.100 Meuro</td>
<td>1.944 Meuro</td>
<td>120 Meuro</td>
</tr>
</tbody>
</table>

**Water quality improvement program**  
**Phase I (2009) 980 Meuro**  
**Water quality improvement program (including 36 Meuro of diagnostic phase of drinking water resource program) Phase II (2015) 596 Meuro**  
**Resources protection monitoring program 200 Meuro**  
**Replacement investment of worn out infrastructure, not included in water quality improvement program 345 Meuro**  
**Additional capacity (ii)**

- **a) agglomerations > 2.000 PE:**  
  - Period 2004-2015: 2.130 Meuro new collection systems; 1.000 Meuro new/existing plants + sludge treatment; 528 Meuro realized; 850 Meuro ongoing projects; result 1,932 Meuro;  
- **b) agglomerations < 2.000 PE until 2015:** 760 Meuro for collection and treatment;  
- **c) individual treatment until 2020:** 728 Meuro  
- **d) Replacement investment of worn out infrastructure 419 Meuro**

- **Water quality improvement program**  
  - **Selective waste collection, waste sorting and recycling, new landfills, recultivation of old landfills and max 6 incinerators (recovery):** Meuro (114 Meuro already granted);  
  - **b) Budapest 62 Meuro;**  
  - **c) Energy-to-waste plants 150 Meuro;**  
  - **d) Mech-biol treatment 87 Meuro;**  
  - **e) Recultivation of smaller landfills 181 Meuro**

- **1100 Meuro (iv): Biomass based energy production 70% (biomass, biofuel, biogas): 770 Meuro, geothermal 12%: 132 Meuro, solar 8%: 88 Meuro, wind 5%: 55 Meuro, 1.100 Meuro**

- **a) Floods Total 1,464**  
  - Realization of the aims of Vásárhelyi Plan 1,036  
  - Flood protection development of the Danube 86  
  - Flood protection development of other currents 202  
  - Development of flood protection systems in the property of self-governments 140  
  - **b) Drought Total 480**  
  - Water restriction, water supply and water feedback, rehabilitation of water systems 360  
  - Development of managing the inland waters as water resources 120

**Key data gaps:**
- **Water supply:** No physical investment figures of development of new infrastructure (reservoirs, plants) to meet rising demand  
- **Water treatment:** No information on non-compliant STP’s, but included in investment need. No information on existing network to be rehabilitated, raw estimate of financial need (iii)

(ii) There is no investment need calculated to meet additional capacity of drinking water volume. Firstly, the current capacity is quite high. Secondly, the building of new reservoirs and drinking water plants, as well as the replacement of worn out infrastructure must be covered basically from fee incomes in harmony with the principle of total cost recovery.

(iv) It is based on the draft new background study (06,2006) made for the Environmental Operative program. The distribution between different types of RES based on the approximation of importance.
Table 0-2: Key indicators needs requiring further planning and/or investment in 2007 – 2013

<table>
<thead>
<tr>
<th>WATER</th>
<th>WASTE WATER</th>
<th>WASTE</th>
<th>RES</th>
<th>NATURAL HAZARDS</th>
<th>OTHER AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>871 settlements or 2.536.000 inhabitants (25%) without adequate drinking water quality (arsenic, iron)</td>
<td>By 2015 634 collecting systems + compliant STP’s in normal area’s, 26 in sensitive area’s</td>
<td>Additional 1 Mton generated; 0,14 Mton composted; 0,8 Mton landfilled (452 landfillis); 0,6 Mton incineration</td>
<td>RES 6 % and RES-E 3,6 % by 2010,</td>
<td>Flood endangered area 23 % of the country; 2,5 million people, 30 % of the GDP;</td>
<td></td>
</tr>
<tr>
<td>Water demand rise of 110 million m³/year or 10 % (2002-2015)</td>
<td>By 2015 241.261 ton sludge to be used in agriculture, 118.830 sludge to be landfilled</td>
<td>By 2014 65 % reduction of landfilling biologically degradable waste</td>
<td>Additional production by 2013 in GWh: Wind 694; solid biomass 2.400; biogass 218</td>
<td>36 % of the dikes on large rivers and 65 % of control structures on local rivers not compliant with safety rules</td>
<td></td>
</tr>
<tr>
<td>Current connection rate 98 %, other 2% in remote areas</td>
<td>By 2015 87 % collection of waste water (62 % at present) ; 100 % treatment in sensitive areas</td>
<td>More than 2.000 landfill sites to be recultivated</td>
<td>Additional production by 2013 in GWh: geothermal 32; solar electric 0,34</td>
<td>70 % cultivated land, last 5 years in between 30 and 90 % of the country endangered by drought</td>
<td></td>
</tr>
<tr>
<td>Current water loss 24%</td>
<td>No information on non-compliant STP’s and existing network to be renovated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1.2.3 Issues reducing the amount of needed investments

Alternative Funding Sources

Existing or planned ways of supporting investment to meet needs through for example market support measures:

Field 4 (renewable energy): In assessing the high feed-in tariffs, only PV, hydro and biogas do not seem economically viable without financial support. Hence investment funds should focus on these three. However, at the moment a new environmental energy strategy is being developed, the need for funding is again reopened to all possible types. This issue should be resolved before considering investment support.

The extent to which the type of investment needed has previously been funded by the MS; and/or is already part of nationally funded plans; and/or is considered to be a MS responsibility:

Field 1 (water supply): Focus of SF support should go to improvement of drinking water quality, as stated in national plans. Extra drinking water capacity (volume, reservoirs & new network) and renovation of the existing drinking water network will be dealt with using MS funding/user charges.

Field 2 (waste water treatment): The acquis forces MS to ask in the first place funding for new STP’s and collectors as well as upgrading of existent STP’s for larger agglomerations. This is still a huge task in Hungary. Nevertheless, also the renovation of the existing sewer network and the treatment of individual polluters seems an enormous financial burden that local MS funds (user charges) cannot overcome on its own.

Field 3 (municipal solid waste): At present the main goal is to develop complex regional collection-treatment systems. Accordingly the prevention and real utilisation lags behind. The solutions mean development of oversized landfills which require a lot of technique and energy but little manpower. The recultivation of old landfills is a serious and urgent task and it can be seen that the municipalities don’t have financial sources for the purpose, while the groundwater and soil is getting seriously polluted at many sites (more than 2000 sites are not yet recultivated).

Field 4 (renewable energy): A new environmental energy strategy is currently being developed – see above.

Field 5 (natural risk management): Forest fires are not an SF issue in Hungary. The protection against flood (in low-lying Hungary 25 % of the country at risk) requires enormous investment which cannot be solved with MS funds only, although MS contribution can be expected. After Hungary’s joining the EU, the national support schemes fused with the support of the EU's structural and cohesion funds on the field of water damage prevention. The former Environment and Water Fund was abandoned. Also drought is becoming an enormous issue (e.g. large agricultural activities in the Great Plain) which can only be solved with SF support.
Use of flanking measures

The current application of user charges and the associated revenue at current rates in the given fields over the period 2007-2013:

Fields 1 and 2: The charges in general cover the operational and maintenance costs and in principle renewal costs, but in practice partially cover development and reconstruction costs, differing per municipality.

Field 3: The charges in general cover the operational and maintenance costs, landfill closing costs and in principle renewal costs, but in the practice partially cover development and reconstruction costs. But it depends on the municipalities.

The scope to raise additional revenue through higher rates of existing charges or from new charges, taking into account affordability:

Fields 1 and 2: a detailed assessment has been made of the effect of user charges, possibilities and effect of raising the charges (already high raise in the near past) and any affordability issue (see 4.1.2). Highest fees would lead to a 3 % of the average household income but 10 % of the low incomes, forcing a social subsidy for this category. Studying the recent past, no further effect of raising charges on drinking water volume is expected.

Field 3: It is estimated that in 2008, the average waste user charge would be around 1.5 % for the average household and 3 % for the lowest income households. The increase of waste charges is becoming more and more an affordability issue for the average Hungarian household. Harmonization of service charges and a social compensation system will be needed.

Fields 1-2-3: It is difficult to answer this question in general (the report includes a detailed affordability analysis). There are substantial differences in both the water, the wastewater and the waste charges applied by the different providers and different settlements. In the case of poorer households (bottom 1/10 concerning income) those paying average charges have already reached the 5% limit. Presently, water and wastewater charges and average waste charges account for 2.5% of the average income, regardless that services do not meet EU requirements in most settlements. Thus the income from charges has to double to account for 5% of the prevailing average income. If EU requirements are fully met, even average income households will reach the 5% limit in some regions. An additional increase in charges is to be expected, if part of the developments are not implemented using government, EU or municipal subsidies, but with the aid of loans, bonds or private investors.

PPP's and other measures with effect on need for investment:

- PPP:

   In Hungary, there is no separate law for PPP. The implementation of PPP projects is controlled by three levels of regulations. Alongside the basic principles and guidelines of the European Union, national rules, which are in harmony with the above, also provide guidance, all of which is supplemented by the third pillar, the individual system of agreements pertaining to the individual PPP project. The majority of present and future projects implemented in a PPP system are classified as public procurements,
which are regulated in Hungary by Act No. CXXIX of 2003 on Public Procurements (APP).

There is no political decision in relation to applying PPP in any areas of environmental protection. In principle, the application of PPP is possible in the field of public goods and public services, where profit can be attained (e.g. waste, wastewater, drinking water, eco-tourism).

The widespread use of PPP in the field of environmental protection is basically not to be expected. As was mentioned above, in some regions the increase in charges may reach 70-100%, even without alternative financing, with the involvement of considerable credit and PPP, charges increase to 3-5 times the original, which exceeds the affordability limit even for the average income population. PPP can ensure funds for development areas not assisted by the European Union, from which areas funds are diverted by the domestic co-financing required for EU assistance.

Up to now, the involvement of the private sector resulted in a decrease in the share of EU assistance, consequently, this option was not exercised by the beneficiaries: the state or the municipality, as this would have increased the contribution of the beneficiary to such an extent, that would have been unfeasible for municipalities already faced with a shortage of funds. If this system of conditions is modified favourably, than PPP may replace or decrease the national contribution or contribution from the beneficiary required for projects assisted by the Structural Funds or the Cohesion Fund, and this may increase absorption capacities.

- In relation to the specified investment fields:

Field 1 and 2: the existing plans for waste water treatment do not take into account a rise in drinking water use, which is likely to happen. However normally the design of STP’s should be able to deal with this additional (10%) waste water volume.

Field 1 and 2: The assets of water utilities were not only transferred to local levels (with the exception of the five regional companies), but since 1991 private participation in the sector was also made legal. Private investors can own a minority stake in water and wastewater companies, and therefore, indirectly, water and wastewater infrastructure. Private partners can contract with the owners (the municipalities or the central government) to operate the assets and provide the services. Until today there have been 8 instances of PPPs. Of the seven presently operating PPPs only one started after 1997, the other six PPPs have a history dating back to the mid 1990’s. There is no private sector investment for the main infrastructure.

Field 3: the extra costs of selective waste collection are 30% financed by compliance schemes based on the producers’ responsibility. There is no information on the effect of e.g. public awareness campaigns to reduce the amount of household waste.

Field 3: In Hungary the local municipalities are responsible for basic scavenger services (Act LXV/1999 on the local municipalities). The local governments have to contract a public service provider company for collection and transport of waste to further treatment or disposal. The static assets – landfills, machinery, composting sites, waste bins, buildings etc. – generally belong to municipalities. Contracted public service provider companies or operating firms run and maintain the existing assets. Through the compliance schemes the private packaging producers indirectly finance the municipalities and waste collection/recycler companies to increase the rate of selective collection and recycling. The private sector also has investments in public-
private-partnership constructions, but PPP is not yet widespread. Eg. the private company constructs the landfill from its own financial resources in a municipal land/area and the municipality contract for a long term operation with the company and pays for deposition of the settlement’s waste. Beyond these there are many multinational companies active in the field of municipal waste collection and treatment from mid 1990s.

**Institutional and absorptive capacity**

Fields 1-2-3: In these fields, there is already experience with SF funding in the previous years and different projects are still on-going. However, the financial requirement is substantially higher then the past (2000-2006) Structural Assistance. Furthermore, the most important institutional challenge is the fact that the planned programmes affect a lot of settlements and service providers (and more and more smaller settlements) especially in the field of water supply, waste water, and municipal waste. Therefore the following urgent tasks have to be fulfilled:

- Improvement of project preparation (planning phase);
- Improvement of project adsorption capacity at beneficiaries (local experts at municipalities);
- Avoidance of the over planning by capacities;
- Ensure substantial role for inspection of affordability and willingness to pay issues during planning process.

Fields 4 and 5: Very limited experience with SF funding in the past. Institutional capacity problems are likely to be expected. Furthermore, different ministries and sectors are involved, complicating the project pipeline preparation and decision mechanism.

Field 4: In order to co-ordinate the process leading to the solution of renewable related problems and to promote renewables’ interests an official governmental body should be established (that could be within one of the ministries but it should have enough power to enforce measures needed). This should build up and harmonise a comprehensive support scheme consisting of both long term, predictable investment support and production support. The latter should include differentiated, high-enough but decreasing feed-in tariffs over a longer term.

Field 4: One of the most important advantages of the renewables when compared with the fossil based energy production can be the positive attitude of the population. This should be evolved through education, starting at primary school level. This knowledge helps people to decide whether a certain investment should be backed or not. As a result it will be less easy to play off the population against the environment or vice-versa.

Field 5: The struggle against floods and droughts can only be efficient, if the population and smallholders concerned are able to accommodate to the water balance and water resource conditions. In the reorganization of farming the support from the smallholders is necessary. Thus it would be also necessary to harmonize these measures with the agricultural-environmental disbursements of the National Agricultural and Rural Development Programme. In practise this means that after the realization of developments influencing the water balance relations, the recompensation of the smallholders and the backing of their landscape maintenance activity has to be started immediately. As the European Agriculture Fund for Rural Development (EAFRD) got
out from sphere of structural funds and the planning is totally separated the harmonization of the supports can be risky.

Field 5: The maintenance, operation and protection tasks, regarding waters and water structures not in state property, are done in a water management association form, this institutional system is suitable for the accomplishment of the protection tasks. The proprietorship of this association form is characterized by a collective of state and government officials and private persons. It is not yet clear from the EU support scheme whether this institutional form completing tasks of a public purpose would be supported.

Field 5: Flood protection is a “traditional” policy field for which considerable national budget was available in the past and with strong (engineering know-how) regional ministerial departments in water management. Furthermore, for each project and certainly for the more technical solutions, the risk of opposition for both the agricultural and the green lobby should be anticipated.
1.2.4  *Net remaining potentially absorbable investment needs*

This table gives the financing requirement after absorption review, starting from the total investment need and taken into account the investment that can be covered by market schemes and/or user charges as well as the absorptive capacity per field.

Table 0-3: Estimate of the financial requirement for all fields, 2007-2013

<table>
<thead>
<tr>
<th>Stage in the Field Assessment</th>
<th>Field 1 Water supply</th>
<th>Field 2 Waste Water</th>
<th>Field 3 Waste</th>
<th>Field 4 RES</th>
<th>Field 5 Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Indicative Total Investment Needs (Meuro)</td>
<td>2.121 Meuro</td>
<td>3.738 Meuro</td>
<td>1.736 Meuro</td>
<td>1.100 Meuro</td>
<td>1.944 Meuro</td>
</tr>
<tr>
<td>B: Investments likely to be covered by market schemes (eg purchasing of renewables)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0 (v)</td>
<td>0</td>
</tr>
<tr>
<td>C: Amount recovered from existing user charges not included in investment need</td>
<td>345 Meuro (replacement of worn out infrastructure)</td>
<td>419 Meuro (replacement of worn out infrastructure)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D: Further amount that could be recovered from higher rates for existing or new charges to fund investment</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E: Financing Requirement Before Absorption Review (A-B-C-D) (Meuro)</td>
<td>1.776 Meuro</td>
<td>3.319 Meuro</td>
<td>1.736 Meuro</td>
<td>1.100</td>
<td>1.944 Meuro</td>
</tr>
<tr>
<td>F: Absorptive Capacity (% of Financing Requirement (E))</td>
<td>80 %</td>
<td>- 978 M Euro (vi)</td>
<td>80 %</td>
<td>50%</td>
<td>50 %</td>
</tr>
<tr>
<td>G: Financing Requirement After Absorption Review (Meuro)</td>
<td>1.420 Meuro</td>
<td>2.341 Meuro</td>
<td>1.389 Meuro</td>
<td>550 Meuro (v)</td>
<td>972 Meuro</td>
</tr>
</tbody>
</table>

(v) Taking into account the feed in tariff and subsidy mechanism the EU subsidy rate (30%) will be significantly lower than in the other fields.

(vi) A very low absorptive capacity (10 %) is estimated – resulting in only financial need for some pilot projects – for the investments for agglomerations below 2.000 PE (760 Meuro) and for the investments in individual treatment (627 Meuro).
1.3 PART 3: PRIORITIES

1.3.1 Indicative suggestion of the allocation of resources

It is likely that the total financial need (as given higher up) will be substantially higher than the available structural funds, necessitating a priority assessment in allocation across the fields.

We could consider three scenarios:

- Scenario 1: The available amount is divided relative to the needs;
- Scenario 2. More weight is given to compliance with the Acquis;
- Scenario 3: More weight is given to Regional Development.

Although much more (intermediate) scenarios are possible, these three scenario’s, further concretised, would give already an idea about the consequences of priority setting on allocation of funds across the fields.

Combining the three scenarios above, the following range of allocations can be expected:

Table 1-4: Expected range of allocations, 2007-2013

<table>
<thead>
<tr>
<th>Field 1</th>
<th>Field 2</th>
<th>Field 3</th>
<th>Field 4</th>
<th>Field 5</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DWS</td>
<td>WW</td>
<td>MSW</td>
<td>RES</td>
<td>RISK</td>
<td>minimum allocation (%)</td>
</tr>
<tr>
<td>21%</td>
<td>32%</td>
<td>21%</td>
<td>5%</td>
<td>8%</td>
<td>21-25</td>
</tr>
<tr>
<td>maximum allocation (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25%</td>
<td>39%</td>
<td>23%</td>
<td>8%</td>
<td>16%</td>
<td>21-25</td>
</tr>
<tr>
<td>allocation range (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-25</td>
<td>32-39</td>
<td>21-23</td>
<td>5-8</td>
<td>8-16</td>
<td></td>
</tr>
</tbody>
</table>

The following conclusions are proposed:

- less % allocation in the next programming period should go to the 2 “traditional fields” waste water treatment and municipal solid waste in comparison to the previous programming period, although these 2 fields will stay the predominant fields with about 60 % funding;
- It will create more room for funding drinking water supply projects, with an allocation estimate of about one quarter (25 %); as a great financial need has been established in order to provide the Hungarian population with adequate quality drinking water;
- The Hungarian situation as a downstream country prone to flooding problems in Danube and Tisza catchments; gives body to the financial need demand in the (for structural funds new) field of risk (flooding, also drought issues); justifying a % allocation of about 10-15 %;
- A minor % contribution (about 5 %) can go to RES-projects (especially a great potential for wind energy).

1.3.2 What are the priorities?

Field 1: water supply

The proposed investments are totally related to the improvement of the production capacity in order to provide drinking water that meets quality regulation. The quality issue is mostly related to high natural load of heavy metals in ground water. The time logics (phase I and II) provided in national programs are positively judged. Funding
should also go to monitoring and protection of drinking water resources, to avoid further deterioration of raw water quality with nutrients.

Funding should not go to extension of capacity, as existing capacity is enough to meet demand. Reconstruction demand of the network or production facilities should be funded by existing charges.

Field 2: waste water treatment

The type of projects to be funded will be mostly a continuation of the previous funding period: new STP’s including sludge treatment, new sewer network. Within the type of projects, the order is typically a function of the size of the projects (e.g. number of IE per agglomeration for a WTP); it is to be expected that in the coming period, the scale of the projects will decrease (smaller agglomerations needing adequate water water treatment), hence establishing a greater need for capacity building. Some funding (taking into account the low absorbability of local initiatives) should be reserved for pilot projects regarding water treatment of smaller agglomerations (< 2,000 PE and/or individual treatment).

Replacement of worn out infrastructure should basically be covered by existing user charges.

Field 3: municipal solid waste

There is a clear parallel with field 2. The type of projects to be funded will also be mostly a continuation of the previous funding period. Emphasis will lie on complex processing, recycling and recovery facilities, new landfills, incinerators and rehabilitation of the larger landfills. As the scale of the projects will decrease (smaller agglomerations) there will be a greater need for capacity building.

The recultivation of smaller, old landfills is a very important issue, as there is a potential danger for lack of institutional capacity and absorbability at these smaller municipalities, as well a lack of adequate funding. This situation endangers a sustainable protection of the ground water resources (link with field 1).

Field 4: renewable energy

RES priorities are first of all a function of physical possibilities for renewable energy. This would emphasize the need for relatively more funding of wind energy projects and biomass.

However, the final need for funding will strongly depend on the national strategy, which is not clear on the moment. High feed-in tariffs would mean that not much financial help is needed for these RES-technologies. Furthermore, there seem to be contradictive figures on % and total amount of subsidy to be spent per type of RES.

Field 5: natural risk management

Flood protection measures and anti-drought measures are both to be considered as funding priorities.

Forest fire protection is not an important funding issue in Hungary.
1.3.3 Why are they priorities?

Compliance with the Acquis

The financial need regarding field 1 (drinking water supply) is in essence acquis driven as investments are primarily for improving drinking water quality. This quality problem is caused by a natural heavy metal loading of the groundwater and not (as a major reason) by anthropogenic pollution;

In the fields of waste water (field 2) and waste (field 3), projects are very much “acquis driven” and the acquis even dominates the timing (larger projects first).

Consistency between environmental and other policies and priorities

Field 1 (water supply):
There is a new Groundwater Directive in the pipeline (European Council published a draft version 30.05.2006). The existing Hungarian Water Quality Improvement Program should be in line with this new Directive in order to avoid unnecessary investments (e.g. it is clear that natural arsenic content of groundwater in Hungary cannot cause health effects, but purification to standards which are atypical for Hungary should be avoided).

Field 5 (natural risk management):

The proposed investments regarding anti-flood measures will contribute to the new Flood Directive which is in the pipeline.

Furthermore, it is clear that anti-flood and anti-drought measures contribute to a Sustainable Development policy. However, the final allocation percentage for anti-flood measures should however strongly depend on the local support or opposition against certain (more technical) projects from green NGO’s, farmers, local economical organisations, etc.

Projects concerning the drought issue are a typical example of a win-win situation for both the environmental and agricultural European policy;

Regional development benefits

The objective of the new 2007-2013 budget period is to place more emphasis on measures of a preventive nature within the context of environmental developments, and following this interim period (in which the switch to preventive measures can commence with the availability of required infrastructural developments) from 2013 onwards, to ensure the dominance of measures of a preventive nature.

In the 2007-2013 period environmental developments will be supplemented with two priorities of first rate importance:

- Increasing the usage of renewable sources of energy (EOP)
- Promoting sustainable production and consumption habits (EOP)
- In relation to brown field investments, the remediation of polluted areas as part of settlement rehabilitation and economic development. (ROPs)
- Logistics tasks in relation to the raw materials of biomass production. (ROPs)
- Renewable developments established within the individual or complex renovation of public institutions. (ROPs)
The establishment of environmentally friendly regional transport systems. (ROPs)

The implementation of complex water management programmes, as part of integrated regional development programmes. (ROPs)

The revision of the National Action Programme (NAP) implementing the Lisbon Strategy has commenced, in which the following strategic guidelines relevant concerning environmental protection have been formulated:

- Improving the efficiency of the economic incentive system (developing the system of environmental assurance, the reconstruction of the tax system so as to further incorporate ecological aspects)
- The development of the environmental protection industry and of cleaner technologies of less material and energy requirements (improving the efficiency of green public procurements, developing the system of allowances e.g. product fee, VAT, the expansion of subsidy and credit programmes)
- The improvement of energy efficiency and making available the use of renewable energy sources (through increasing the EOP sources for development, see above)
- Strengthening environmentally friendly waste management (urban waste management regional projects, the management of special waste flows, preventive measures and the establishment of the selective collection system of settlements, preventing the generation of waste and the attitude formation of the population aimed at the conscious management of waste produced
- Education concerning environmental awareness

Field 2: Some funding should be reserved for pilot projects regarding water treatment of smaller agglomerations (< 2,000 PE and/or individual treatment), as these projects could have a local development benefit (rural development, development of tourism, effect on local health).

Field 5: Flood protection measures (such as natural inundation areas or winterbeds) do provide a great potential for win-win situations and regional development in remote areas (less economical damage, recreation potential, natural values, agriculture, etc.).

**Contribution of the environmental strategy for promotion of competitiveness and convergence**

An important risk associated with increasing competitiveness throughout the world is that it may result in an unwanted level of difference between areas. The economy mainly presented a competitive advantage to bigger cities and agglomerations, resulting in the fall-back of rural areas. Consequently, the aim of new environmental developments is on the one hand to supply rural areas with ample infrastructure, and on the other to increase the level to which rural areas are able to retain employment, e.g. through the energy related utilisation of plants.

Infrastructural differences between areas are substantially decreased by the KOP, it explicitly improves opportunities for economic and area development in underdeveloped areas. The majority of developments conducted based on multiple priorities will explicitly be realised in economically underdeveloped areas. From this respect, drinking water and wastewater are areas to be highlighted. The two regions most affected by the drinking water quality improvement programme are the Southern
Great Plain and Northern Great Plain region, while the three regions most affected by the wastewater programme and by increasing the supply of sewerage are also the Southern Great Plain, Northern Great Plain and also the Northern-Hungarian region. These regions are at the same time situated in areas of Hungary that are underdeveloped as concerns the economy, the establishment of work opportunities, etc.

Until 2009 (drinking water) and 2015 (wastewater), the above regions will take a considerable step towards the country average as concerns water utilities, giving a substantial boost to the development of the economy. A good majority of flood developments will also be implemented in the less developed Great Plain regions of the country.

The new KOP contributes to reaching the goals of competitiveness and convergence through supporting the following developments:

- Developments affecting competitiveness and balance in the environmental sector
  
  An important factor of improving competitiveness is the presence of an infrastructure that services the economy. For industrial activities of considerable technology requirement, the state and cost of usage of the environmental infrastructure is an important factor when making the decision to invest in Hungary or to stay in the country.

- The improvement of competitiveness through infrastructural developments (at the same time meeting member state obligations)
  
  - Sewerage and wastewater treatment
  
  - Waste management with the objectives of creating job opportunities and material and energy efficiency
  
  - Ensuring the supply of healthy drinking water
  
  - Water related investments for regional development

Money spent on improving the wastewater and drinking water systems and on constructing waste management systems also serves the economy in a direct manner. The employment related benefits of environmental projects are more favourable, even when compared to 'traditional' working capital investments.

A 33% increase in employment in the sector is expected concerning new waste management projects, while a 50% increase is expected concerning the development of water utilities (drinking water, wastewater).

- Improving competitiveness through developments facilitating economic efficiency
  
  - Energy efficiency and renewable energy developments, which improve competitiveness
  
  - Developments aimed at modifying environmental industry and consumption, which improve competitiveness

Environmentally friendly, material and energy efficient and waste efficient products and services improve economic efficiency and consequently competitiveness. Today, one of the major elements of improving competitiveness is decreasing energy dependency, and decreasing energy prices and CO2 emission. All Forints spent on improving energy efficiency and exploiting renewable energy sources have the effect of replacing gas and crude oil imports, decreasing public spending and improving the balance.
• Investments aimed at developing the protection of citizens and their property, and at attracting investors (convergence)
  – Flood protection
  – The development of underdeveloped areas through environmental interventions
  – The elimination of polluted centres most threatening to health and the drinking water base

National stated priorities that do not seem so important to the evaluators given developments
None.

Priorities that were not seen as such by the National authorities but should be

Field 3: The recultivation of smaller, old landfills is a very important issue, as there is a potential danger for lack of institutional capacity and absorbability at these smaller municipalities, as well a lack of adequate funding. This situation endangers a sustainable protection of the ground water resources (link with field 1).

Fields 1-2-3: It remains unclear whether the MS pays enough attention towards prevention (reduction of water use, waste prevention) by e.g. household campaigns, etc. Besides being a principle for sustainable development, prevention projects could reduce the need for certain end-of-pipe solutions, especially in field 2 (smaller STP’s) and field 3 (less landfill capacity need). On the contrary, for instance water demand (or water unit demand) is forecasted to augment, although current water prices are considered to be high and to have an effect on demand.

Important flanking measure to encourage efficiency and effectiveness
Existing charges (water and waste water, waste) are already at the affordability level, leaving no room for additional charges or fees. However, the existing system would create enough national funds to ensure adequate replacement investment for the existing networks of drinking water and sewerage, which would make these replacement investments no priority for SF funding.

PPP’s have already been introduced in the market of water supply & treatment and waste management. In the recent past, the introduction of PPP’s has not been that successful, in terms of reducing the need for public financial support. Hence, there is no evidence that these PPP’s would develop to such an extent that they would have a significant impact on the financial need in the period 2007-2013.
1.4 PART 4: KEY ISSUES AND QUESTIONS FOR THE NEGOTIATIONS

These questions were put forward both by Ecolas and the Geographical Unit of DG Regio. Preliminary comments & answers are provided for some of the questions by the national evaluator Öko.

Fields 1-2-3: Due to the downscaling of the projects in the next planning period, problems concerning technical capacity and absorbability at municipalities and other local beneficiaries should be anticipated by the central government by asking funding for capacity building, project pipeline support and know-how exchange.

Preliminary comment on competence of regional development agencies by the national evaluator: According to the plans, sources of the upcoming 2007-2013 period will basically be financed by the Cohesion Fund (85%), which is not a regionalised source, and most of the projects planned do reach over the boundaries of the various regions (waste, drinking water, flood protection, etc.) For major national developments sector operative programmes are produced, the participating organisations of which will be the Ministries. The regional development agencies will primarily be involved in the implementation of regional operative programmes and in managing smaller scale projects. In past years regional level professional institutions already had a role in developing the various projects. Up until 2004, when joining the EU, some of the domestic systems of subsidies were utilised on a regional scale, and even today regional development councils decide as to what sources are available for municipalities for infrastructural developments (target subsidies, target estimates for area and regional development, etc.).

Fields 1-2-3: Taking into account the previous remark, it is suggested to investigate whether a consolidation of the market in both water supply & treatment and municipal waste treatment (regional organisation in stead of local municipal initiatives) would not create synergies both from financial and from environmental point of view.

Fields 1-2-3: It remains unclear whether the MS pays enough attention towards prevention (reduction of water use, waste prevention) by e.g. household campaigns, etc. Besides being a principle for sustainable development, prevention projects could reduce the need for certain end-of-pipe solutions, especially in field 2 (smaller STP’s) and field 3 (less landfill capacity need).

Field 2: In the past funding period, there have been problems regarding the definition of agglomerations for waste water treatment and the need to provide adequate technical solutions for smaller agglomerations (too much emphasis on central solutions). What will be done in the forthcoming period to avoid this?

Preliminary comment by the national evaluator: In this respect, it came as a big step forward that above 2000 PE, the Environmental Operative Programme supports not only traditional sewerage and wastewater treatment solutions, but also individual wastewater treatment and natural treatment. It’s true, that the National Wastewater Treatment Programme includes such settlements, but there is a legal regulation on defining agglomerations, which stipulates that an economic and technical analysis has to be conducted for defining the real area of the agglomeration, thus it will be defined which settlements and which parts of settlements can and should be supplied with sewerage and in which areas are individual solutions more efficient. In the future, this should consistently be applied in the actual preparation of projects to a more efficient
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degree. The reconsideration of the definition of agglomerations can be conducted following the acceptance of the planned EU guidelines applicable.

Field 3: The recultivation of smaller, old landfills is a very important issue, as there is a potential danger for lack of institutional capacity and absorbability at these smaller municipalities, as well a lack of adequate funding. This situation endangers a sustainable protection of the ground water resources (link with field 1).

Field 3: Too much emphasis in the past funding period has gone to end-of-pipe solution (incinerators). Will this change? Are more end-of-pipe solutions still necessary?

Preliminary comment by the national evaluator: It’s important to emphasize that the main goals of complex regional collection-treatment systems are diverting waste flow from landfilling to utilisation by:

- the introduction of selective waste collection and sorting facilities,
- utilization of biodegradable wastes by composting,
- utilization by energy recovery.

The establishment of new, high capacity landfills are not a priority, but a basic need to have a minimum capacity (42 landfills after 2009) for residual waste, which can’t be utilized in an other way. The planning of projects after 2001-2002 is mainly focus on energy recovery and 2separation of utilizable waste, the landfilling is only a comlementary part.

The National Waste Management Plan elaborated in 2001 has planned the building of maximum 6 incinerators. Recently, Hungary has only one waste-to-energy plant (incinerator over 60% efficiency for energy recovery) located in Budapest with 420,000 tons/yr capacity. As the amount of MSW was 4.7 million tons/yr (in 2004) in Hungary and will slightly increase in forthcoming years (even by promoting prevention), the planned maximum 6 plants would cover additional 600,000 tons/yr capacity. If the 6 new plants start operating, the total incinerator capacity would reach the 1.030,000 tons/yr, which would be still only the 20% of generated and collected MSW to be treated and utilized by thermal energy conversion. This rate would be far less than other EU members such as Belgium (54%), France (42%) Netherlands (35%), Germany (36%), Luxemburg (75%), Sweden (47%) or Denmark (48%). (On the other hand there is the direction on waste management that the possibility of direct landfilling will be reduced. In Switzerland (non-EU) the landfilling is prohibited from 2004. In Austria from 2005 only the ash or highly pretreated waste can be landfilled.)

Based on the latest negotiations with decision makers and strategic planners in MoEW the new waste management strategy will probably include need for only 3 new waste-to-energy plants, but higher, 250-300,000 tons/yr capacity. The planned 3 waste-to-energy plants would ensure 750-900,000 tons/yr capacity in addition, which would lead to 1.170,000-1.320,000 tons/yr total capacity (with the existing Budapest plant). By 2013 the incineration capacity would cover 20-25% of the predicted 5700 th.tons/yr MSW (2013).

Beyond the steps enforcing prevention and recycling (central legislative actions and promotion in complex programmes) Hungary is still lack of waste-to-energy plants. So, the strategy is not focusing on incineration, but the country should be equipped with
the minimal capacity, which is better alternative than landfilling by energy recovery and saving valuable farmlands. Furthermore, if the Commission sets up a new legislative action banning the landfilling (which is still under negotiation), Hungary will be in serious trouble without the incinerators’ capacity and the 80% of generated waste would have to be still treated in other way.

Field 3: The central coordination of the waste management should be improved, based on experiences in the past funding period.

Preliminary comment by the national evaluator: By the beginning of this year the main official basis of waste strategy was still the out-of-date National Waste Plan elaborated in 2001. Between 2002-2004 the MoEW has been very busy with the harmonization of EU and Hungarian legislation, which was an extremely huge task. After that action plans have been issued for some of the specified waste streams (bio-wastes, accumulators, selective MSW collection, etc.) in 2005. There were changes in this year and by the pressure of the DG Regio the MoEW has started to reconstruct the waste management strategy this summer and the new waste management strategy (including new strategy for incineration) will be elaborated by September 2006. The long term strategy will be harmonized with the 2nd National Development Plan for 2007-2013.

Field 4: There are however still a lot of question marks regarding the total financial need and the possible funding mechanisms (feed-in tariffs); which should be cleared out first, before allocating funds to a certain type of RES. Issues such as inter-ministerial cooperation, practical issues (e.g. licenses), lack of policy prioritisation (e.g. clear vision on environmental effects of wind farms) should receive full attention to enable a successful RES strategy.

Field 5: Flood protection measures (such as natural inundation areas or winterbeds) do provide a great potential for win-win situations and regional development (less economical damage, recreation potential, natural values, agriculture, etc.); however this approach asks for a participatory and multi-disciplinary planning phase on catchment scale. Before providing funding to anti-flood measures, it should be well investigated whether the technical project plans have taken into account these aspects in order to avoid problems in further stages due to inadequate spatial development and protest from local, green and/or agricultural organisations.

All fields: How will the absorbability be improved, taken into account the current implementation structure (administration, procedure, project preparation) which has led to difficulties in the past funding period?

Preliminary comment by the national evaluator: The organisations in charge of implementation are well-prepared, accredited and their operation is under continuous control (Central Control Office, State Audit Office), in past years, the institutional framework for participating organisations has been established. A modification is expected however in the institutional system, namely that the Managing Authorities will be allocated to the National Development Agency (NDA). In this case, the professional role played by the Ministries should be reconsidered. A substantial drawback resulting from the method of decentralisation so far conducted is that national coordination is not applied in decisions, records and control. If the Managing Authorities are centralised, than the sphere of competence of intermediate bodies should be expanded, primarily in decision making.
It can be generally stated that the engagements are of adequate level, but the level of payments is lower. One of the reasons is the low progress speed of the projects, another is low rate of the available own resources of the beneficiaries. The necessary steps of increasing the efficiency and absorption could be – among other – the following:

- The procedural orders are too complicated, because of the intention to minimise the repayment risks to an undue rate; NDA also intends to simplify the procedures unambiguously according to the plans.
- To assist the availability of the beneficiaries’ own resources (subsidies and banking facilities should be developed)
- Problems arising out of the inadequate preparation of the projects. A solution could be to involve more projects than those covered by the available resources, and then screening/selection can be made later out of them, in order to reach the 100% commitment.
- The change of the technical contents of the subsidised projects represents problems in the progress, and therefore the planning of projects of adequate quality must be supported in the future (at present the large projects receive subsidy first of all, and the question is whether it could be extended to the smaller (central) projects, too).
- The lengthy public procurement procedures (frequent legal remedies) result in significant delays, in the interest of which the opportunities of the public procurement procedure should be reviewed, e.g. conditional public procurement.
- The significant archaeological excavations’ needs regarding finances and time represented a major problem (the problem can be solved if the archaeology can be accounted for in the future).