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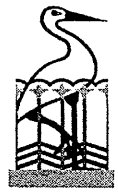

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CONCEPTUAL APPROACH FOR THE HARMONIZATION OF ENVIRONMENTAL STANDARDS IN THE ESCWA REGION

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CONCEPTUAL APPROACH FOR THE HARMONIZATION OF ENVIRONMENTAL STANDARDS IN THE ESCWA REGION

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Harmonization of Environmental Standards in the Energy Sector

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SUMMARY

One of the main challenges towards the integration of economic development in the Economic and Social Commission for Western Asia (ESCWA) region is harmonization of environmental standards. Moreover, the question of harmonization of environmental standards has emerged and lodged at the heart of trade and environment discussions for the last few years. The general objective of harmonization is to increase both the regional and global compatibility in developing and administering environmental standards where differences are not essential to protecting national environment or public health.

ESCWA is urged to consider the harmonization of environmental standards in energy sector in general and power production in particular in the region, in order to ensure compatibility with regional and/or global requirements related to environmental quality protection, regulation of high-tension transmission grids, and control of transboundary movement of pollutants, and to ensure compatibility with design and process standards related to requirements of international financing institutions.

Conceptually, the benefits associated with the harmonization of environmental standards, as witnessed in other regions of the world, would include reducing non-tariff trade barriers, improving economies of scale, reducing competitive distortions, eliminating "race to the bottom", and achieving environmental objectives.

The first step in the process of harmonization is the comparative analysis of the environmental standards of the ESCWA region and/or global standards versus the national standards to determine the existing state of conformity. In this case, the first role of the government is to precisely define and evaluate what is required by the regional and/or global standards, and to review the national standards to examine whether there are national standards that cover the subject matter. The second role should be the nomination of the competent environmental authority/authorities that have the licensing, permitting, and enforcement powers to assume the overall responsibility for the implementation of the harmonized environmental standards. The third role is to provide the means to accommodate changes in the national environmental standards. This might entail the institutional needs and the financing of capacity building for administration and enforcement of the new standards. Fourth, the government should ensure the enforcement of the newly adopted or modified standards, by taking all necessary measures to improve the monitoring, inspection and control mechanisms in the power sector.

The task of harmonizing environmental standards in the ESCWA Region appears to be difficult due to the sheer scale of past environmental negligence, and wide gap in the level of environmental protection among ESCWA-Member States (ESCWA-MS). One group of difficulties likely to face harmonization is related to the harmonization process itself, and might include complex issues such as the specificity of national environmental conditions and endowment of each ESCWA-MS, setting of acceptable upper & lower limit standards, and different technical approaches in predetermining the agreeable standards and risks.
The other group of difficulties is more direct and associated with the capacities of the national and local authorities, in terms of information, laboratories, and qualified

human resources, required to properly implement, monitor, inspect and enforce compliance with the harmonized standards.

The exercise of harmonizing environmental standards in ESCWA-MS will be subject to controversial aspects that might facilitate or hinder harmonization. Positive Aspects include the lack or near absence of emission and operational standards particularly in energy sectors of some ESCWA-MS, putting them in a better position whereby they can adopt new standards that are easily compatible with globally recognized environmental standards. In addition, the lack of technical and institutional capacities led most of ESCWA-MS to adopt standards formulated by international organizations, thus acceptable and compatible with prevailing regional/global standards for the purpose of harmonization. Another positive aspect is that unconsciously, several countries of the ESCWA region have developed experience in harmonization through the initiation, negotiation, approval and implementation of large-scale energy projects funded by international donors such as the World Bank, European Bank, Development Banks, etc.

On the other hand, negative aspects would include the insufficient awareness surrounding the need for harmonization among decision makers; the ill-defined role of both central and local governments in the ESCWA region in carrying out the harmonization process; the unclear and inadequate capacities needed either technically or institutionally to perform such a task and the insufficient legal systems that specify the requirements needed for monitoring and enforcement. In addition, harmonization with other prevailing regional/global standards is always questionable by most developing countries, and the competent environmental authorities responsible for the implementation of the harmonized environmental standards suffer from fragmentation, difficulties in coordination, and overlap in functions.

I- INTRODUCTION

One of the main challenges towards the integration of economic development in the Economic and Social Commission for Western Asia (ESCWA) region is harmonization of environmental standards. Moreover, the question of harmonization of environmental standards has emerged and lodged at the heart of trade and environment discussions for the last few years. At the regional level in Europe, the Organization for Economic Co-operation and Development (OECD) recommended the harmonization of environmental standards where valid reasons for differences do not exist and where there are significant obstacles to trade. Similarly, at the global level, the General Agreement on Trade and Tariff (GATT) Agreement on Technical Barrier to Trade (TBT) strongly encourages the international harmonization of environmental standards to avoid trade distortions.

The task of harmonizing environmental standards in the ESCWA Region appears to be difficult due to the sheer scale of past environmental negligence, fragmentation, liabilities, and wide gap in the level of environmental protection among ESCWA-Member States (ESCWA-MS). In all cases, the general objective of harmonization is not to achieve identical sets of environmental standards among ESCWA-MS, but rather to increase both the regional and possibly global compatibility in developing and administering environmental standards where differences are not essential to protecting national environment or public health.

ESCWA region can take great advantages when addressing the issue of environmental harmonization from the series of globally available and most commonly used environmental standards. It is important to note that among the organizations already engaged in such harmonization efforts are the OECD (e.g. chemicals program), the Food and Agriculture Organization (FAO) (e.g. food safety standards), the World Health Organization (WHO) (e.g. air and water quality criteria). The International Organization for Standards (ISO) was very instrumental in the area of environmental measurement standards, Environmental Management Systems (EMS) "ISO-14000 series", etc. Furthermore, the draft GATT TBT agreement recommends that multilateral standardizing bodies develop international standards concerning products of special concern to developing countries.

In order to develop and manage an economically and environmentally sustainable framework at the regional level, it is obviously fundamental, first, to develop a regional cluster of environmental standards for ESCWA-MS as a platform to harmonize with. The lack of such a regional bundle of environmental regulations has urged the Energy, Natural Resources and Environment Division (ENRED) at ESCWA to initiate the present exercise to explore the availability and the degree of compatibility of environmental legislation at the national level in selected countries and in specific sectors. The development of a suggested core of environmental standards covering various fields such as energy, water, transport, industry, etc should follow the current stage of scouting investigation. Conceptually, ESCWA-MS would play a pivotal participatory role in initiating and developing this core of environmental standards with technical support provided by ESCWA and possibly other concerned regional organizations. However, the major challenge ahead appears to be the means of increasing the compatibility of national environmental policies to conform to the core of environmental standards to be adopted by ESCWA-MS at the regional level and the prevailing international standards at the global level. Ecological

interdependence may warrant harmonization of environmental policies other than product standards. For the purpose of illustration, the following examples can be provided:

- when activities by one country have a negative effect on the environment of other countries (e.g. transboundary pollution),
- when activities by one country endanger the global environment (e.g. ozone depletion, global warming, etc.)
- when activities of one country affect the common stock of resources (e.g. biodiversity, endangered species).
- when multinational corporations exploit and manipulate the environment of developing countries by practicing environmental dumping.

Second to the development and adaptation of regional environmental standards is the process of harmonization. It is the objective of the environmental harmonization process to ensure the complete alignment of national environmental standards in ESCWA-MS –and the corresponding administrative systems- so that they totally comply with the adopted prevailing environmental standards either in the ESCWA Region or globally. The first step in the harmonization process is obviously to make a complete and precise assessment of the legislative and administrative gaps at the national levels, which need to be filled in order to, ensure compatibility and compliance.

It is important to note that the road to full environmental harmonization for the purpose of more efficient trade and better economic integration in the ESCWA region is very long and probably thorny. However, the benefits for the public health, the natural environment, the quality of life in general and the economies of ESCWA-MS in particular will, by far, outweigh the efforts, which have to be made in order to reach the ultimate goal.

The main objective of the present work is to explore, set the stage and provide a conceptual approach for the harmonization of environmental standards in the ESCWA Region with special emphasis on the energy sector. This will entail the benefits, scope, constraints, prospects, identification of the role of the governments and the steps needed to accomplish the harmonization process.

II- BENEFITS ASSOCIATED WITH THE HARMONIZATION OF ENVIRONMENTAL STANDARDS

Conceptually, the harmonization of environmental standards in other regions of the world was undertaken to materialize the following:

1. **To Reduce Non-Tariff Trade Barriers**: The harmonization of environmental standards will lead to lesser possibility that these standards (environmental) will form non-tariff barriers to trade. It will help reduce the extent of testing and certification of products. It will also reduce the administration of environmental product standards that might pose trade difficulties. The range of environmental standards that are currently posing non-tariff trade barriers is expanding to include food products, industrial products, etc. This has already been experienced by some ESCWA-MS, for instance the cases of pesticide residues in oranges, brown mold and DDT in potatoes, Azo dyes in fabrics and

lately Tri-methyl-butyl-ether in petrol. In the near future this will encompass standards on packaging and labeling as well as processes and production methods.

2. **To Improve Economies of Scale**: Trade liberation and increased economic integration, at the regional and global levels, will promote convergence in environmental product standards to reduce production costs for firms. Harmonization of environmental standards will reduce the number of environmental specifications ESCWA's firms have to observe during production for exportation.
3. **To Reduce Competitive Distortions**: Greater harmonization of environmental ambient and process standards would reduce the costs of complying with different national regulations (from different importing countries) to modify the relative competitiveness of industries in international trade.
4. **To Eliminate Race to the Bottom**: Harmonization of environmental standards might help neutralize inter-country differences in environmental regulations and possible shifts in foreign investment due to varying environmental costs. Regulatory and cost differences have been alleged to lead to increased foreign direct investment abroad in more polluting facilities and consequently the creation of pollution heavens. The necessity of harmonization of Environmental Impact Assessment (EIA) policies, standards and procedures is fundamental to avoid environmental dumping in the ESCWA region.
5. **To Achieve Environmental Objectives**: Harmonized environmental standards of nations with lower levels of existing protections could bring needed ecological benefits to the member states. Greater convergence of environmental standards may be particularly important in cases of regional and global transboundary pollution such as global warming, preservation of biodiversity, stratospheric ozone depletion, protection of transboundary watercourses, etc.

III- REASONS FOR THE HARMONIZATION OF ENVIRONMENTAL STANDARDS IN THE POWER SECTOR OF THE ESCWA REGION

The main reasons urging ESCWA to consider the harmonization of environmental standards in energy sector in general and power production in particular in the region can be envisaged as follows:

1. **To secure compatibility with regional and/or global requirements for environmental quality protection**. This is particularly true for issues such as global warming, biodiversity, ozone depletion, acid rain, etc. National commitments resulting from the ratification of regional and/or international environmental conventions necessitate harmonization with the standards specified in the conventions. These standards or international requirements can encompass emission and effluent standards; performance; and operational standards prescribed for the protection of public health, nature, ecology and cultural heritages. Emission and effluent standards usually specify permissible levels of pollutants released from a given process or piece of equipment in physical terms, either in masses (Tons/year) or per unit of input (Gram

CO2/Gaga Joule energy input), output, product or per unit of time. Emission standards, which impose an obligation to achieve a result and leave the power sector free to choose how he will comply, are usually more flexible than design standards, which impose an obligation to use certain production or control methods.

2. **To ensure compatibility with design and process standards related to requirements of international financing institutions**. Design and process standards are mandated plant design such as stack height, restriction on input use, and requirement for use of low sulfur fuel and/or pollution control equipment such as stack scrubbers, desulphurizers, filters, etc. This sort of standards represent a real challenge particularly when power plants are financed by loans from international banks such as World Bank, European Bank, Development Banks, etc. The new policy of these financial institutions is for project proponents (usually governments) to harmonize their process standards with a set of international guidelines prepared for this purpose. These guidelines present maximum allowable emissions levels that can be achieved at low cost for all new plants, and a process for establishing stricter emission levels in response to local ambient conditions. The guidelines are usually observed during EIA studies. They usually emphasize on the use of cleaner fuels wherever these are economically feasible, and focus on the operational performance of controls as well as design standards.
3. **To guarantee compatibility with regional environmental requirements regulating high-tension transmission grids**. Regional linkage with high-tension transmission lines will necessitate the harmonization with regional requirements related to their associated environmental aspects. These aspects are usually expressed in terms of environmental standards that might include the following:
    - Aesthetic considerations of power-lines,
    - land requirements for power towers,
    - interference of the grid with lines of communication,
    - potential ozone generation by corona or electric discharge,
    - environmental hazards associated with exposure to electromagnetic fields in the vicinity of power lines,
    - safety measures,
    - contingency plans for emergencies, and
    - environmental impacts of construction and commissioning of high tension power grids.
4. **To ensure compatibility with regional and/or international environmental requirements associated with the control of transboundary movements of pollutants**. In many cases, power production from fossil fuel leads to the emission of large masses of pollutants in the form of SO2, NOx, particulates, CO2, etc. Based on the rates of emission, meteorological conditions (particularly wind direction), and patterns of dispersion, some of these pollutants might cross international borders to neighboring countries. The same is particularly true if transboundary watercourses are used as a discharging medium for cooling waters released from power plants. In such a case, harmonization of ambient as well as operational standards of the power sector in the region will be fundamental to eliminate any bilateral or multilateral disputes. The harmonization of these environmental standards will also provide the

equitable technical foundation for the peaceful resolution of potential transboundary environmental conflicts.

IV- THE PROJECTED ROLE OF ESCWA GOVERNMENTS IN THE HARMONIZATION OF ENVIRONMENTAL STANDARDS

The first step in the process of harmonization is the comparative analysis of the environmental standards of the ESCWA region (to be developed in a later phase) and/or global standards versus the national standards to determine the existing state of conformity. The analysis might also include the most probable national response scenario to the regional and/or global standards.

The first role of the government in this case is to precisely define and evaluate what is required by the regional and/or global standards. In this connection it is important for ESCWA-MS to note that the compatibility with regional/global standards should be implemented in ways adjusted to the unique bio-geo-physical and socio-economic circumstances of each ESCWA-MS. The ultimate responsibility of the national governments is to take binding measures that fully carry out the letter and the spirit of the regional/global standards to harmonize with.
The initial evaluation consists of a review for the national standards to examine whether there are national standards that cover the subject matter. Where there are relevant national standards, each item of the regional and/or global standards should be compared to the corresponding item in the national standard and/or criteria. The comparative evaluation of national standards may lead to the following conclusions:

1. There are no national standards that correspond to the regional and/or global standards. In this case, national environmental standards should be adopted with compatibility to regional/global standards as a heavy weight function in the selection process. National environmental standards, aimed at harmonizing with regional/global standards, should be first integrated with national environmental priorities and principles in a matter that corresponds, to the most possible extent, with the regional/global standards.
2. The national standards partially correspond to the regional and/or global standards. In which case, the government will need to consider gaps that may remain and the best feasible means of dealing with them.
3. The national standards entirely correspond to the regional and/or global standards. In such a case the government will conduct a simple assessment for conformity.
4. The national standards appear to be in conflict with the regional and/or global standards. In such a case, the analysis should then be followed by a review of options for the modification of relevant environmental standards (whether to adapt existing standards or to replace them).

The second role of the government should be the nomination of the competent environmental authority/authorities that have the licensing, permitting, and enforcement powers under national environmental legislation to assume the overall responsibility for the implementation of the harmonized environmental standards. In case of fragmentation in implementation capacities, competencies may be divided

among several authorities at the same level or at different levels. For example, the ministry of planing or public works may have responsibilities in the implementation of the directive on EIA. Ministry of Irrigation and Water Resources may control and monitor cooling water discharges to the water bodies. Local, provincial, and national authorities such as municipalities, local governments, and Ministries of Environment respectively, may all have competence for issuing environmental permits controlling emissions to air, water or land. Moreover, monitoring and enforcement may be partially or wholly delegated to provincial or municipal authorities.

The third role of the government is to provide the means to accommodate changes in the national environmental standards. This might entail the institutional needs and the financing of capacity building for administration and enforcement of the new standards. Gradual provisions should be used to bring existing power plants gradually within the scope of the new regulatory system. The cost and benefit associated with different implementation choices of the new standards have to be considered. An evaluation of the financing needed for the administration and for investment, in order to be compatible with the regional/global standards, should also be carried out.

The fourth role of the government is to ensure the enforcement of the newly adopted or modified standards. The government should take all necessary measures to improve the monitoring, inspection and control mechanisms in the power sector. This can be materialized by strengthening their inspection systems and by taking administrative and judicial measures, in order to ensure that their compatible environmental standards are properly implemented and complied with.

V- DIFFICULTIES ASSOCIATED WITH HARMONIZATION OF ENVIRONMENTAL STANDARDS IN THE ESCWA REGION

The harmonization of environmental standards of the energy sector in ESCWA-MS might be subjected to two main groups of difficulties. The first group is related to the harmonization process itself. This might include complex issues such as the specificity of national environmental conditions and endowment of each ESCWA-MS, acceptable upper & lower limit standards setting, and technical approaches in predetermining the agreeable standards and risks.
The other group of difficulties is more direct and associated with the capacities of the national and local authorities required to properly implement, monitor, inspect and enforce to comply with the harmonized standards.

V-1- DIFFICULTIES ASSOCIATED TO THE HARMONIZATION PROCESS

1- Specificity of Environmental Endowments and Preferences:

During the harmonization process, special attention should be given to the legitimate differences in environmental standards across various ESCWA-MS due to the significant variations in their environmental endowments and their particular national preferences. The specific environmental endowments of a certain country are usually based on the following:

- The natural capacity or sensitivity of land, water and atmosphere as determined by such factors as climate, rainfall, wind patterns and geological location.
- The substantial disparity in the value that citizens place on environmental quality, in their assessment of relative risk and their approaches to managing the risk.
- The current demand on the natural environment as reflected in levels of industrialization, agriculture, urbanization and pollution.

For reasons of both ecology and national sovereignty, environmental standards will definitely differ from country to country reflecting their relative environmental situation and their collective choices. These differences may also be a major source of comparative advantages in trade. Harmonization of environmental standards in ESCWA-MS is not supposed to dismiss comparative advantages resulting from legitimate differences in environmental endowments among countries.

2- Setting of Lower and Upper Limits for the Harmonized Standards:

In the first case, lower standards are adopted at the regional/global level to ensure a fast, easy and maximal national harmonization. This approach might be the only available alternative towards achieving regional/global agreement on common environmental standards. Evidently this approach might ultimately lead to some sorts of environmental deterioration due to the adoption of less stringent standards in some countries of the ESCWA region. For this reason, it is strongly recommended that regional/global standards should serve as a platform to build upon rather than a ceiling for national environmental standards. This would reduce tendencies for lowering environmental standards, but might not contribute significantly to reducing trade frictions resulting from national variations.
In the second case (the other extreme), setting higher standards for the purpose of harmonization is still considered by some countries in the ESCWA region as an excuse to limit market access to certain products and the subsequent loss of export opportunities.

3- Practical Problems of Harmonization:

In addition to differences in environmental endowments and natural resources, countries of the region might also differ in their approaches and practices in managing their environments. Countries of the ESCWA region might differ on factors such as "safe" levels of emissions, acceptable purity of water or air, procedures and uncertainties associated with risk identification and assessment, tolerance levels and the degree of risk acceptable by their communities.

V-2- DIFFICULTIES ASSOCIATED WITH IMPLEMENTATION CAPACITIES

Unfortunately, implementation does not occur automatically once harmonization is carried out. Achieving compliance usually involves efforts to promote, encourage, and ultimately compel the behavioral changes needed to achieve compliance. Scarcity of technical and human resources will make it difficult for some ESCWA-MS to harmonize and enforce the same level of environmental standards that exist in the developed world.

The main stumbling blocks to face implementation of harmonized environmental standards in ESCWA-MS are the lack of enforcement capacities and coordination among local and national competent environmental agencies.
The most common pragmatic procedure for effective implementation and compliance with harmonized environmental standards include the following:

1. Issue the required environmental requirements (harmonized standards, acts, procedures, codes of conduct, etc.).
2. Promote compliance through communication of these requirements by publication of relevant information, consultation with affected parties, provision of technical assistance to affected parties, etc.
3. Enforce the adopted standards through the following:

    - Development of the inspection capacities, credible monitoring, and accredited measuring systems to verify compliance,
    - Preparation of procedures for investigations of violations and rules for assessment of penalties,
    - Identification of the measures taken to compel compliance without resorting to formal court action, and
    - Development of measures to compel compliance through court action.

The main difficulties that might hinder implementation of future harmonized environmental standards in the ESCWA region include one or more of the following elements:

1. Lack of environmental information, database, and inventories on industrial processes and their associated emissions or effluent discharges to the environment.
2. Fragmentation of environmental authorities controlling environmental aspects of industrial production in ESCWA-MS.
3. Lack of national expertise in the area of environmental risk assessment of emitted chemicals; identification of their potential toxicological and environmental effects; identification of their technological control measures; and development of environmental management systems.
4. Inadequate environmental laboratories needed for the characterization of emitted pollutants and their potential transformation in the natural environment.
5. Lack of experience in the assessment of total pollution loads emitted or released form various point and non-point (fugitive) sources in large industrial complexes.
6. Lack of expertise in mathematical simulation modeling to project the transport, dispersion, dissipation and dilution of the emitted pollutants to propose threshold limits for emission.
7. Lack of experience in relating emission loads to impacts on ambient environment and to define its assimilation capacity.

VI- PROSPECTS OF HARMONIZING THE ENVIRONMENTAL STANDARDS IN ESCWA REGION

Based on the given discussion it is projected that the exercise of harmonizing environmental standards in ESCWA-MS will be subject to the following controversial aspects:

I- POSITIVE ASPECTS THAT MIGHT FACILITATE HARMONIZATION IN ESCWA-MS:

1. The lack or near absence of emission and operational standards particularly in energy sectors of some ESCWA-MS will render the process of harmonization easier for these specific countries. This will put them in a better position whereby they can adopt new standards that are easily compatible with globally recognized environmental standards from the beginning, without going through the agony of reformulating and amending old standards.
2. Due to the lack of technical and institutional capacities, most of ESCWA-MS have adopted standards formulated by international organizations such as WHO, ISO, International Labor Organization (ILO), FAO, etc. On the other hand, other member states have adopted regional standards such as European Union (EU) and OECD standards, while others also considered either Canadian and/or American standards developed and implemented by national competent authorities such as United States Environmental Protection Agency (US-EPA), Canadian EPA, etc. Fortunately, OECD, GATT, World Bank, and other donors have already recognized most of these environmental standards as acceptable and compatible with prevailing regional/global standards for the purpose of harmonization.
3. Unconsciously, several countries of the ESCWA region have developed experience in harmonization with prevailing global/regional environmental standards. This experience was mostly developed during, the initiation, negotiation, approval and implementation of large-scale energy projects funded by international donors such as the World Bank, European Bank, Development Banks, etc.

II- NEGATIVE ASPECTS THAT MIGHT HINDER HARMONIZATION IN ESCWA-MS:

1. The awareness surrounding the need for harmonization of environmental standards as a fundamental means to merge national economies into global and or regional economies is insufficient among decision-makers in the ESCWA region.
2. The role of both central and local governments in the ESCWA region in carrying out the harmonization process is ill-defined.
3. The capacity needed either technically or institutionally to perform such a task is not well pointed or clear and the required budget might be difficult to justify.
4. Harmonization with other prevailing regional/global standards is always questionable by most developing countries. The suspicion of being manipulated by the developed world to limit trade access to Western markets and to curb development will always be a stumbling block towards

harmonization. The scenario of conspiracy contributed to the appearance and propagation of the negative term "environmental imperialism".

5. The legal systems specifying the requirements needed for monitoring and enforcing the compliance with harmonized environmental standards are insufficient. This inadequacy encompasses both the acceding process and implementation procedures in ESCWA-MS.
6. The capacities either technical or in human resources of the competent environmental authorities are usually inadequate to carry the extra duty of harmonizing with prevailing regional/global environmental standards.
7. The competent environmental authorities responsible for the implementation of the harmonized environmental standards suffer from fragmentation, difficulties in coordination, overlap in functions, and inadequate technical and human resources.

VII- CONCLUSIONS & RECOMMENDATIONS

Harmonization of environmental standards in all sectors appears to be an inherent and critical part of the relentless exercise ESCWA-MS has to undertake to survive globalization. Because of the difficulties associated with the harmonization of environmental standards in the power sector in ESCWA-MS, the institutional capacities and procedural questions appear to be extremely important. However, there is large room for generally improving the environmental standard setting and enforcement capabilities of ESCWA-MS. This would also include the increase of effective involvement and proactive participation of ESCWA-MS in international harmonization initiatives.

ESCWA-MS should focus first on the harmonization of environmental ambient and process standards to use them as methods for dealing with issues such as:

- EIA policies and procedures. ESCWA is proposing such exercise for the 2000-2001 biennium.
- transboundary movement of pollutants
- financing large development projects with associated environmental impacts by international banks and donors, and
- addressing commitments and obligations resulting from ratification of global environmental conventions.

In a later stage, ecological interdependence may warrant harmonization of environmental policies other than product and process standards.

Most of the ESCWA member states have undertaken macroeconomic structural reforms that favor the production of export goods to be in a better position to benefit from the liberation of international trade. Such an orientation necessitates cutting costs to remain competitive. This often means using the environment as a free or relatively inexpensive input. The trade-off between environment and development could therefore, affect the ESCWA region most acutely, as countries in the region strive to achieve competitiveness in an increasingly competitive global economic environment. This competitive approach contradicts the main objectives and defeats the binding commitments resulting from the harmonization of environmental standards in the ESCWA region.

The tenacious global competitive climate will undoubtedly drive some countries in the ESCWA region to compromise or even jeopardize the quality of their environment

to acquire limited economic opportunities. Defying the harmonization of environmental standards will ultimately lead these countries to what has been recently called "The Race to the Bottom".

Increasing relocation of pollution incentive industries from developed countries to some countries in the ESCWA region might take place to make use of some cheap natural resources (e.g. natural gas, oil, water etc.) cheap labor, and the relatively lax environmental standards and regulations in particular. The lack of harmonized environmental standards might transform some ESCWA member states into "pollution heaven".