

REPORT OF THE ARAB REGION ON THE THEMATIC AREAS OF CSD-15¹

I. POLICIES AND MEASURES FOR THEMATIC AREAS:

A. ENERGY FOR SUSTAINABLE DEVELOPMENT

The Arab energy sector has played and will continue to play an important role globally as well as within the region. It is serving as the source of oil and gas export revenues and satisfying energy needs for economic and social development. However, several challenges are facing the sector in achieving the objectives of energy for sustainable development in the region, including the rapidly increasing energy demand, lack of reliable energy supplies in rural and urban poor areas, the need to improve energy production and consumption efficiencies, limited support for renewable energy development and lack of appropriate mechanisms to support transfer of advanced energy technologies to the region.

Arab countries have devoted efforts towards improving the sustainability of their energy sector, where reasonable but not sufficient progress has been achieved. The following measures and policies were identified and are gradually being adopted; assistance is needed for further promotion in these areas:

- Enhancing access to affordable modern energy services for all communities mainly in rural & remote areas using a mix of available energy resources;
- Upgrading energy production & consumption efficiencies, particularly in energy-intensive industries, transport and power sectors;
- Promoting energy labeling, reviewing energy tariffs, and encouraging private ESCOs;
- Enhancing investments in oil and gas exploration and production activities, using cleaner technologies, and adopting measures for reducing the sector's environmental impacts;
- Promoting the use of natural gas in the power and transport sectors;
- Developing renewable energy technologies and promote their application as appropriate to each of the country needs and resources;
- Reviewing existing tariffs so as to support the economic management of the sector while maintaining energy subsidies for the poor;
- Encouraging private sector participation in the establishment & management of energy facilities, including power plants and distribution networks;
- Mobilizing funds for capacity building, technology transfer and energy systems so as to meet increased energy demand.

B. ATMOSPHERE / AIR POLLUTION

The issue of air quality and atmospheric pollution in the Arab region has been addressed through consideration of the energy production and energy consumption pattern. Global, regional and local sources of air pollution in the region have been examined. The emission scenarios of many countries of the region have been outlined.

¹ This report has been prepared through a process of collaboration among the League of Arab States, the Economic and Social Commission for Western Asia (ESCWA) and the United Nations Environment Programme Regional Office for West Asia (UNEP/ROWA). The report comprises of the four thematic areas for CSD-15

Variable institutional capabilities for air pollution management and control still prevail among countries in the region.

Most Arab States have already passed legislation to protect the environment. Numerous air quality standards have also been issued in conformity with international guidelines. As a result of the adopting of programmes for cleaner energy, the employing of new and efficient technologies and the setting of environmental standards, improvements in air quality have been observed in the region.

The following policies and measures were identified; assistance is needed for further promotion in these areas:

- Establish new, and improve existing, air pollution monitoring and control programmes for mobile and stationary emission sources, and to continue the assessment and analysis of ambient air data.
- Monitor meteorological profiles of the atmosphere to allow better interpretation of air pollution dispersion dynamics in urban areas (pollution, source, attribution, techniques), and hence the exercising of better control.
- Use of sound urban planning for cities with support systems that are environmentally sound and have low energy consumption.
- Use of sustainable transport programs, including modern efficient traffic management systems to reduce traffic idle time in cities, which produces peak emissions.
- Continue efforts to phase out leaded gasoline, replace ageing vehicles and industrial production facilities, increase availability of cleaner fuel including natural gas stations and intensify forestation.
- Upgrade and update monitoring networks, data analysis and assessment, capacity-building and accreditation.

The international community is urged to provide technical and financial assistance to address the issue of air quality and atmospheric pollution, including transboundary air pollution. Joint programmes are needed to address common priorities of the countries in the region in the domain of air pollution monitoring and control, assessment of impacts associated with air pollution, and the exchange and dissemination of air pollution data. Developing subregional/regional air quality networks and a regional centre of excellence should be considered a matter of priority

C. CLIMATE CHANGE

There are aspects of climatic circumstances including variations in rainfall and water resources that are specific to Arab countries. Most of the Arab countries are located in the arid and semi-arid zones where the climate is extremely hot and humid in the summertime, which is approximately between seven and nine months long. In most countries, during the summer, temperatures could exceed 50 degrees Celsius, and humidity exceeds 90 per cent in coastal areas. In addition, the region suffers most of the year from deficient precipitation which ranges from 50 to 150 millimetres (mm). The hot and humid climate requires extensive use of indoor air conditioning. In addition, the lack of precipitation and the scarcity of water resources, particularly in Gulf Cooperation Council countries, dictate the need for high desalination capacity. This has led to comparatively high rates of electricity consumption, and corresponding rates of carbon dioxide emissions. Greenhouse gas emissions vary widely among Arab countries, reflecting variability in energy consumption, levels of development, fuel mix and change in climatic conditions.

The Global Environment Facility and other bilateral and multilateral donor organizations are mandated to facilitate the transfer of climate-friendly technologies to Arab countries, the international community should also support Arab countries and regional collaboration on climate change control and mitigation strategies.

Clean Development Mechanism (CDM) is crucial to the Arab countries due to its direct contribution to the sustainable development. CDM Development projects have been pursued in some Arab countries in cooperation with industrialized countries. There is a need to ensure equitable geographical distribution for CDM projects among all UN regions. There is also a need to enhance capacity building for CDM in the region.

Many efforts are being exerted by countries of the Arab region towards mitigating climate change. However, these efforts need to be supported by the international community through actions including:

- Training activities are greatly needed in areas such as vulnerability and adaptation assessments, climate modeling and observations, and data management.
- Supporting Arab countries in their efforts to establish institutional capacities in the field of climate change;
- Supporting Arab countries in the environmental and economic impact assessment of climate change and the corresponding adaptation measures needed;
- Transferring environment-friendly technologies to the region;
- Supporting regional collaboration on climate change control and mitigation strategies and assisting them in joining the international efforts in this respect;
- Mitigating the impact of policies and measures adopted by the industrialized countries to comply with the United Nations Framework Convention on Climate Change and the Kyoto Protocol to the Convention and compensating the losses incurred by the Arab nations due to these measures.

D. INDUSTRIAL DEVELOPMENT

Oil and gas resources play an important role in the economies of the Arab region as exports and as supporting inputs for the energy-intensive value-added industries that are proliferating in oil producing countries. Mining and processing of industrial minerals and metals, which have increased alongside fossil fuel extraction, are considered an important source of foreign currency in the region.

Sustainable industrial development continues to face several challenges in the region. In many countries, these actions may include protection against competing imports, financial subsidies and discrimination in government procurement in favour of public sector industries. Such actions may hinder the shift towards cleaner industry.

Industrial environmental management is increasingly regarded in the region as an effective tool with which to improve production processes and materials and achieve efficient waste reduction, particularly in large-scale industries.

The Arab countries require greater technology transfer and development of cleaner production technologies in the region, which could be realized with policies and measures that promote:

- Private sector development in sustainable industries, and extend financial and technical support to small and medium-sized enterprises;
- Recovery and reutilization of waste, and establishing a national clearing house for waste exchange;
- Strategic interventions at the policy level to improve processes and products through adoption of the new approaches of life-cycle assessment, industrial environmental management, sustainable consumption, cleaner production, ecolabelling, and the instituting of innovative financing mechanisms to encourage private sector involvement;
- Voluntary initiatives to encourage the use of environmentally sound technologies, while enforcing compliance with emission standards;

- Research and development to improve industrial practices through development of environmentally sound technologies, and promote their application with due regard to cost-effectiveness;
- Integration of sustainable approaches in industry with similar efforts in the services, infrastructure and resource management sectors;
- Institution of a regional system for information network to act as a delivery mechanism for information concerning legislation, emissions standards, cleaner technologies, waste minimization and industrial environmental management;
- Public awareness and participation through increased flow of information from industry and government to the public and other stakeholders, and vice versa;
- Internal and external monitoring, self-monitoring and auditing schemes to support environmental enforcement and to enhance efforts for maintaining a clean environment for the benefit of workers and the surrounding communities.

II. SUCCESSFUL AND RECOMMENDED ACTIONS AND PRACTICAL MEASURES

- Several Arab countries have adopted successful programmes for improving energy production and consumption efficiencies, mainly in the electric power, industrial and residential sectors. Programmes to improve energy efficiency have led to an increase in capacities of large groups including high-level administration, engineers, technicians and the establishment of energy service companies. ESCWA is currently implementing a project for energy efficiency in the Qatari electric sector.
- The Arab regional integration projects on electricity grid interconnection, gas networking have made considerable progress in recent years. A number of projects on the sub-regional level are at different stages of implementation and operation.
- Partnership on energy for sustainable development, established through the Council of Arab Ministers Responsible for the Environment (CAMRE) in close cooperation with UNESCWA and UNEP/ROWA. Several principal Arab declarations have been issued with a view to expressing the concerns and commitments of the Arab countries in respect of the achievement of sustainable development.
- The ESCWA regional promotional mechanism on energy systems for sustainable development, is regional network of concerned authorities that proved to be effective in fostering regional cooperation, advocating for the development as well as field applications of such systems, and in building capacities of national professionals.
- Several Arab countries have implemented national programmes to promote participation in the Clean Development Mechanism.
- Arab countries have achieved remarkable success in introducing cleaner and advanced fossil fuel technologies such as switching to natural gas, upgrading the technologies of oil refineries, improving fuel specifications and adopting vehicles inspection and maintenance programmes.