United Nations $E_{\text{CN.17/2001/15}}$



Economic and Social Council

Distr.: General 20 March 2001

Original: English

Commission on Sustainable Development

Ninth session 16-27 April 2001 Item 3 of the provisional agenda*

Sectoral theme: energy

Report of the Ad Hoc Open-ended Intergovernmental Group of Experts on Energy and Sustainable Development

(New York, 26 February-2 March 2001)

Contents

		Paragraphs	Page
I.	Matters calling for action by the Commission on Sustainable Development or brought to its attention.	1	2
	Draft decision.		2
II.	Co-Chairpersons' summary of the proceedings	2-8	20
III.	Adoption of the report	9	21
IV.	Organizational and other matters	10-16	21
	A. Opening and duration of the session	10-13	21
	B. Agenda and organization of work	14	22
	C. Attendance	15	22
	D. Documentation	16	23
Annex			
	List of participants		24

^{*} E/CN.17/2001/1.



I. Matters calling for action by the Commission on Sustainable Development or brought to its attention

1. The Ad Hoc Open-Ended Intergovernmental Group of Experts on Energy and Sustainable Development transmits to the Commission on Sustainable Development at its ninth session the following draft decision, for consideration and appropriate action:

Draft decision

On the recommendation of the Ad Hoc Open-Ended Intergovernmental Group of Experts on Energy and Sustainable Development, the Commission on Sustainable Development adopts the text contained in the annex.

Annex

Negotiated Text*

Contents

		rage		
A.	General considerations	3		
B.	[General] [Principles] [and] [Policy options]			
C.	(ey issues	6		
	1. Accessibility of energy	6		
	2. Energy efficiency.	7		
	3. Renewable energy	8		
	4. Advanced fossil fuel technologies	9		
	5. Nuclear energy technologies.	9		
	6. Rural energy	10		
	7. Energy and transport	11		
D.	Overarching issues.	12		
	1. Research and development	12		
	2. Capacity-building	12		
	3. Technology transfer.	12		
	4. Information-sharing and dissemination	13		
	5. Mobilization of financial resources	13		
	6. Making markets work [better towards sustainable development]	13		
	7. Multi-stakeholder approach and public participation	14		

^{*} Unagreed text appears in square bracketed bold type.

E.	Reg	gional cooperation	14
[F.	Inte	ernational cooperation	15
	1.	Message to other intergovernmental bodies	15
	2.	Possible options for guidance to the multilateral system	16
	3.	International endeavours	17

A. General considerations

- 1. Energy is central to achieving the goals of sustainable development.
- 2. The magnitude and scale of energy needs facing the world today in relation to sustainable development can be gauged by the fact that nearly one third of the global population of six billion, mostly living in developing countries, continue to lack access to energy and transportation services. Wide disparities in the levels of energy consumption within and between developed and developing countries exist. Current patterns of energy production, distribution and utilization are unsustainable.
- 3. The challenge ahead requires [adequate] [new and additional] financial resources, technology transfer, and, where appropriate, political will, as well as commitment to innovative ways of applying energy efficient, environmentally sound and cost-effective technologies and systems to all sectors of the economy. Energy resources are plentiful, and environmentally sound technological options exist and should be made available and facilitated by developed countries to developing countries and to countries with economies in transition with a view to making energy for sustainable development a reality. Ensuring adequate and affordable access to energy for present and future generations, in an environmentally sound, socially acceptable and economically viable way will require considerable efforts and substantial investments, including from the private sector. Attention will also need to be given to promoting an enabling environment.
- 4. In order to make energy systems more supportive of sustainable development objectives, [involvement by all stakeholders, including more investments by the public and private sectors] will be needed. Change will not be driven by resource constraints for a very long time to come. Energy for sustainable development can be achieved by providing universal access to a cost-effective mix of energy resources compatible with different needs and requirements of various countries and regions. This should include giving a greater share of the energy mix to renewable energies, improving energy efficiency and greater reliance on advanced energy technologies, including fossil fuel technologies. Policies relating to energy for sustainable development intended to promote these objectives will address many of the issues of economic and social development as well as facilitate the responsible management of environmental resources.
- 5. In view of the different contributions to global environmental degradations, States have common but differentiated responsibilities. The choice and implementation of policies to improve the ways to achieve energy for sustainable development basically rests with Governments. However, financial resources play a key role in their implementation. [For [developing countries] least developed countries, ODA is a main source of external funding, and substantial new and additional funding for sustainable development will be required.] A

participatory approach involving all relevant stakeholders could facilitate progress. Given that energy is an area with strong interdependencies among countries, international cooperation should be promoted in line with the principle of common but differentiated responsibilities. The way in which energy issues are addressed in a country depends on the national energy situation and needs. Therefore, a range of options and strategies becomes necessary to address the issues involved. Accordingly, a number of options and strategies that could effect a change in the way energy is dealt with are delineated subsequently. The choice of any specific option would obviously depend on the domestic situation.

B. [General] [principles] [and] [Policy options]

- 6. [Governments] [countries, as well as] [and] relevant regional and international organizations, as well as other relevant stakeholders are invited to consider the following [non-prescriptive] [general] [principles] and [policy options] when dealing with energy, taking into account national and regional specificities and circumstances, bearing in mind the principle of common but differentiated responsibilities.
- 7. Governments may seek assistance, as appropriate, from relevant regional and international organizations in the formulation and implementation of their domestic energy policies. The international community should support national efforts by promoting capacity-building, technology transfer, investment and [making available new and additional resources to] developing countries.

[8. [Governments] [countries] continue to have the responsibility to develop and apply energy policies to achieve sustainable development]:

- (a) Combining, as appropriate, the increased use of renewable energy sources, more efficient use of energy, the use of advanced fossil fuel technologies and other [Sustainable] advanced technologies [(excluding nuclear technologies)] [and nuclear technologies] and the sustainable use of traditional energy resources, which could meet the growing needs of energy services [in the longer term] to achieve sustainable development;
- (b) Integrating energy considerations in socio-economic programmes, especially in policy-making of major energy consuming sectors, such as the public sector, transport, industry, agriculture, urban planning and construction;
- (c) Establishing an appropriate enabling environment conducive to attracting investments and supportive of the objectives of sustainable development and to ensuring public participation;
- (d) Developing appropriate energy services, particularly in rural areas, through the application of the most cost-effective, socially acceptable and environmentally friendly technologies, the deployment of specific energy service delivery structures and the development of renewable energy resources, including biomass;
- (e) Ensuring [security] of energy supply and [management of] [security of] energy demand so as to achieve market stability and better accessibility. [supporting market development and stability to ensure energy supply and consumer access to energy services];

- (f) Establishing programmes for energy efficiency, including, as appropriate, **[goals]** within their countries and by accelerating the **[deployment of energy efficiency]** technologies, with the necessary **[financial]** support of the international community;
- (g) Supporting more use of renewable energies both in grid-connected and decentralized systems;
- (h) Optimizing the efficient use of fossil fuels through the increased development and use of [cleaner], advanced fossil fuel technologies;
- (i) [Concrete measures for] [Enhancing regional and international cooperation on energy for sustainable development];
- (j) All countries should strive to promote sustainable consumption patterns; developed countries should take the lead in achieving sustainable consumption patterns; developing countries should seek to achieve sustainable consumption patterns in their development process, guaranteeing the provision of basic needs for the poor;
- (k) Encouraging public-private partnerships with a view to advancing energy for sustainable development;
- (l) Facilitating the dissemination of information on environmentally sound technologies and processes. To increase awareness of these options and enhance public participation as appropriate in decision-making surrounding the provision of these energy services for sustainable development;
- (m) Strengthening the role of [major groups] [civil society], including women, inter alia, through participation in decision-making, as appropriate, [freedom of access of information, as well as access to justice on environmental issues, including through multi-stakeholder endeavours]; (pending)
 - (n) Supporting energy conservation programmes in all economic sectors;
- (o) Strengthening existing national and local institutions, that develop, implement and operate national programmes on energy for sustainable development;
- (p) [Eradicating poverty is an indispensable requirement of sustainable development. For developing countries, poverty eradication is the highest priority. Environmental standards applied by some countries may be inappropriate and of unwarranted economic and social cost, hindering developing countries' efforts to eradicate poverty];
- (q) [Apply the polluter pays principle through the internalization of externalities for environmental benefits, inter alia, through energy taxes and by phasing out energy subsidies (both direct and implicit) when they are harmful. Various objectives of most existing energy subsidies can be better met by specific, well targeted programmes]; (Programme for the Further Implementation of Agenda 21, para. 29)
- (r) Supporting research, development, and demonstration for the abovementioned activities towards energy for sustainable development, including on transport systems; and enhancing regional and international cooperation in the research and development in these areas.

C. Key issues

9. Concerning the key issues of energy identified at the first session of the Group of Experts, the Commission recommends the following options and strategies in each key issue. To ensure effective implementation of such key issues, the means of such implementation, namely flow of financial resources, [including new and additional ones], transfer of environmentally sound technologies and capacity-building are fundamental.

1. Accessibility of energy

Challenges

10. Access to energy is crucial to economic and social development and the eradication of poverty. Improving accessibility of energy implies finding ways and means by which energy services can be delivered reliably, affordably, in an economically viable, socially acceptable and environmentally sound manner.

- 11. Governments, taking into account their national circumstances, are encouraged to:
- (a) Establish or strengthen national and regional arrangements for promoting energy accessibility within the country;
- (b) Improve access to modern biomass technologies and fuel wood sources and supplies and commercializing biomass operations, including the use of agricultural residues, where such practices are sustainable;
- (c) Support the transition to the use of liquid and gaseous fossil fuels where considered more environmentally sound, socially acceptable and cost-effective;
- (d) Develop locally available energy resources for greater energy diversification, where considered more environmentally sound, socially acceptable and cost-effective, with increasing use of renewable energy resources;
- (e) Support electricity services based on grid extension and/or decentralized energy technologies, particularly in isolated areas, as appropriate;
- (f) Strengthen national and regional research and development institutions/centres on energy for sustainable development, including renewable and advanced fossil fuel technologies, energy efficiency and traditional energy resources; (to be adjusted according to similar paragraphs)
- (g) Promote an enabling environment where the public sector, the private sector and, as appropriate, energy cooperatives, including through public-private partnerships, are encouraged to engage in the generation, transmission and distribution of electricity at **[affordable rates]** and in transfer of technology;
- (h) Develop renewable energy, especially in rural areas, through community-based development methods;
- (i) [Promote innovative financing arrangements aimed at reducing upfront cost of equipment and grid connections;]

- (j) Enhance developing countries' access to environmentally sound and economically viable technologies relating to energy for sustainable development;
- (k) Support equal access for women to sustainable and affordable energy technologies through the needs assessments, energy planning and the policy formulation at the local and national levels.

2. Energy efficiency

Challenges

12. Energy efficiency can be a win-win solution both for developed and developing countries, but currently energy efficiency has not reached its potential. Barriers to optimizing the energy efficiency potential involve lack of access to technology, capacity-building, financial resources, as well as market-related and institutional issues.

- 13. Governments, taking into account national circumstances, are encouraged to:
 - (a) Strengthen public awareness programmes to mobilize all stakeholders;
- (b) Promote an enabling environment for encouraging energy service companies for research and investments in energy efficiency;
- (c) [Study and, as appropriate, improve, energy efficiency codes and standards, for appliances, equipment and buildings;]
- (d) Provide incentives for energy conservation in all sectors, taking into account domestic priorities;
- (e) Develop, as appropriate, at the country and regional level, energy efficiency [strategies/programmes] and policy options [including, as appropriate, indicative goals for energy efficiency improvements];
- (f) Strengthen capacity-building, including education and training, ranging from energy planning to technical engineering, to improve the performance of energy and materials use;
- (g) Accelerate development and deployment of energy efficiency technologies;
- (h) Integrate, as appropriate, energy efficiency considerations into the planning, operation and maintenance of long-lived energy consuming infrastructures, notably transport, urban layout, industry, agriculture and tourism;
- (i) Increase the efficiency of technologies used in the production and consumption of energy;
- (j) Facilitate a movement towards more efficient utilization of energy through equipment manufacturing support programmes, with international cooperation;
- (k) [Encourage the transfer of energy efficiency technologies at preferential prices from developed to developing countries;]

- (1) [Phase out energy subsidies [in developed countries], both direct and implicit [, when they are harmful];]
- (m) [Improve eco-efficiency in order to minimize the net energy input into goods and services;]
- (n) Strengthen, as appropriate, existing institutions that develop and operate energy efficiency programmes;
- (o) Strengthen, as appropriate, existing institutions that compile and disseminate information on energy efficiency programmes and technologies;
- (p) Develop and implement measures that make energy efficiency technologies more affordable.

3. Renewable energy

Challenges

14. The main challenge lies both for developed and developing countries in the development, utilization and dissemination of renewable energy technologies, such as solar, wind, ocean, wave, geothermal, biomass and hydro power, on a scale wide enough to significantly contribute to energy for sustainable development. Despite some progress in promoting renewable energy applications in recent years, inter alia, through the implementation of the World Solar Programme 1996-2005, numerous constraints and barriers, including costs, continue to exist.

- 15. Governments, taking into account national circumstances, are encouraged to:
- (a) Develop and implement appropriate national, regional, and international policies and measures to create an enabling environment for the development, utilization and distribution of renewable energy sources;
- (a) bis [Develop [national] strategies that include [indicative targets] to enhance the contribution of renewable energies to total energy consumption;]
- (b) Encourage the role of the private sector in the development and utilization of renewable energy technologies, through the provision of appropriate incentives and regulation;
- (c) Strengthen research, development, demonstration and institutional capacities in the field of renewable energy utilization, as well as transfer of environmentally sound and [state of the art] [appropriate] technologies;
- (d) Promote utilization of renewable natural resources, such as solar, wind, biomass, geothermal, hydro, including mini-hydro, and ocean (wave, tidal, and thermal energy conversion) resources, to meet part of the energy needs for sustainable development;
- (e) Strengthen information networks, compilation and dissemination systems, and public awareness programmes on renewable energy sources and technologies;
- (f) Develop and use indigenous sources of renewable energy, where appropriate;

- (g) Develop and implement measures to make renewable energy technologies more affordable;
- (h) Strengthen financial support to developing countries for the promotion of renewable energy.

4. Advanced fossil fuel technologies

Challenges

16. Given that fossil fuels will continue to play a dominant role in the energy mix in the decades to come, the deployment and use of advanced and cleaner fossil fuel technologies should be increased. More efforts should go into supporting the further development and dissemination of those technologies.

Recommendations

- 17. Governments, taking into account national circumstances, are encouraged to:
- (a) Develop and apply more efficient fossil fuel fired power plants, buildings, appliances and transportation, including cleaner coal and oil technologies;
 - (b) Increase the [relative] use of lower carbon fuels, where appropriate;
- (b) bis Research, develop, and transfer technologies of transforming from solid fuels to liquid or gaseous fuels;
- (c) Enhance research, development, demonstration and transfer of advanced fossil fuel technologies, leading to lower emissions;
- (d) Promote research, and where suitable, applications of carbon capture and storage [as well as carbon sequestration] technologies;
 - (d) bis [Promote carbon emission reductions;]
- (e) Promote cooperation with industries in a voluntary programme framework for cleaner fossil fuel technology deployment;
- (f) Develop and implement measures to make advanced fossil fuel technologies more accessible and affordable.

5. Nuclear energy technologies

[Challenges

18. Nuclear power currently accounts for 16 per cent of the world's electricity generation. However, nuclear energy is associated with a number of concerns, namely, nuclear safety, spent fuel and waste management. The choice of nuclear energy rests with countries. Several countries have been using nuclear energy technologies safely and see no inordinate concern in using and developing additional technology for properly managing and controlling spent fuel and other nuclear materials. However, several other countries, including small island developing States, do not consider nuclear energy as an appropriate or acceptable source of energy for meeting their energy needs and are of the view that nuclear energy is not compatible with the objectives of sustainable development. For those countries that choose nuclear energy, the challenge lies in finding cost-effective solutions and in

addressing nuclear safety and spent fuel and waste management as well as public concerns on these issues.

Recommendations

- 19. Governments, taking into account national circumstances, are encouraged to:
- (a) Support their national efforts, including research and international cooperation as an effective tool in addressing the issues of nuclear safety and spent fuel and waste management;
- (b) Strengthen independent national regulatory agencies and promote cooperation in nuclear safety across countries;
 - (c) Promote a high level of nuclear safety worldwide by IAEA;
 - (d) Improve the transparency of nuclear safety-related decisions;
 - (e) Prevent the proliferation of fissile materials through IAEA safeguards;
- (f) Promote public education and participation as well as capacity-building of human resources, in the areas of nuclear energy and waste management in countries that choose nuclear energy;
 - (g) Further develop technological solutions for long-lived radioactive waste;
- (h) Address the safety of their nuclear energy installations, as deemed appropriate after assessment by national regulatory authorities, including consideration of the option of phasing out of such installations;
- (i) Taking into account the high risk to human health, safety and the environment from the movement of nuclear waste, the transboundary movement of such waste has to be done in compliance with relevant international instruments.]

6. Rural energy

Challenges

20. To implement the goal accepted by the international community to halve the proportion of people living on less than US\$ 1 per day by 2015, access to affordable energy services is a prerequisite. Efforts to find the most appropriate solution to the energy problems of rural areas are hampered by the enormity of the problem, limited availability of resources and lack of appropriate technologies, high investment cost and connection fees, as well as insufficient attention to rural development in general. An effective strategy to address the energy needs of rural populations can be to promote the climbing of the energy ladder. This implies both improving ways of using biomass as well as moving from simple biomass fuels to the most convenient efficient form of energy appropriate to the task at hand, usually liquid or gaseous fuels for cooking and heating and electricity for most other uses.

- 21. Governments, taking into account national circumstances, are encouraged to:
- (a) Strengthen and, where appropriate, establish policies on energy for rural development including, as appropriate, regulatory systems to promote access to energy in rural areas;

- (b) Develop, where necessary, specific and targeted energy service delivery structures adapted to rural needs;
- (c) Promote local energy enterprises as employment opportunities, enhance local private entrepreneurs, developing local dealers to sell/maintain equipment building on local retail networks and relationships;
- (d) Take into consideration the health and safety concerns of women and children in rural energy programmes;
- (e) [Promote research on and development of indicators, as appropriate, on the rural energy situation, in line with international development targets;]
- (f) Promote a sustainable use of biomass and, as appropriate, other renewable energies through improvement of current patterns of use such as management of resources, more efficient use of fuel wood, as well as new or improved products and technologies;
- (g) Establish financial arrangements to make rural energy services affordable to the poor;
- (h) Support local groups and/or non-governmental organizations in the promotion and delivery of newly developed environmentally sound technologies, including solar cooker technology;
- (i) Develop and utilize indigenous energy sources and infrastructures for various local uses and promote rural community participation, including local Agenda 21 groups, with the support of the international community, in developing and utilizing renewable energy technologies to meet their daily energy needs to find simple and local solutions;
- (j) Promote capacity-building in local societies and remove barriers in the implementation of policies for renewable energy development in rural areas;
- (k) Promote efforts to address the disproportionate burdens experienced by women in rural areas, including carrying loads of fuel woods over long distances and suffering adverse health effects from prolonged exposure to open fires.

7. Energy and transport

Challenges

22. The transport sector is a major energy-consuming sector and the sector for which energy consumption is projected to grow at the highest rate. The challenge is to promote an integrated approach to [developing transport systems for sustainable development].

- 23. Governments, taking into account national circumstances, are encouraged to:
 - (a) Manage transportation demand;
- (b) Implement better transportation practices, including planning, in both urban and rural contexts, particularly towards public transportation systems and rail or water-based freight transport;

- (c) Increase fuel efficiency for different transportation modes;
- (d) Promote the use of cleaner fuels and transport equipment [inter alia, through the progressive elimination of leaded gasoline];
 - (e) Integrate transport policy in other sustainable development policies.

D. Overarching issues

1. Research and Development

24. The enhancement of research and development at the national, regional and international levels of advanced cleaner, more efficient energy technologies, as well as renewable energy technologies, is important for achieving energy for sustainable development for all. Governments are encouraged to develop policies and incentives and to act as a catalyst to foster private sector investment in this field. Increased energy research should also come from public and private investments or through joint public and private partnerships and/or through international and regional cooperation.

2. Capacity-building

25. [Existing disparity in [local] capacity between developed and developing countries is a major obstacle for information-sharing, technology transfer and financial flow.] lack of local capacity is a major obstacle to the expansion of energy services in the developing world.] It is important that institutions, infrastructures and human resources in developing countries be strengthened and that technological leadership in developing countries as well as in countries with economies in transition, with special efforts for least developed countries and small island developing States, be enhanced through international public and private cooperation that supports sustainable development objectives. Developed countries, development banks, UNDP and other relevant agencies, including the regional commissions, as well as bilateral development agencies, should focus on capacitybuilding in development cooperation. A substantially replenished GEF would, among other things, continue to provide support, within its mandate, for capacitybuilding and technology transfer to developing countries to advance energy for sustainable development. International financial institutions should, through their lending policies, support capacity-building and technology transfer as well as efforts to identify local needs.

3. Technology transfer

26. In order to promote energy for sustainable development there is a need for favourable access to and transfer of environmentally sound technologies, in particular to developing countries, through supportive measures that promote technology cooperation and that enable transfer of necessary technological knowhow as well as building up of economic, technical and managerial capabilities for the efficient use and further development of transferred technology. Technology cooperation involves joint efforts by enterprises and Governments, both suppliers of technology and its recipients. Therefore, such cooperation entails an iterative process, involving government, the private sector, and research and development facilities, to ensure the best possible results from transfer of technology. Successful long-term partnerships in technology cooperation necessarily require continuing

systematic training and capacity-building at all levels over an extended period of time.

4. Information-sharing and dissemination

27. Information- and knowledge-sharing on technologies and policies facilitate efforts to achieve energy for sustainable development. Relevant information could direct decision makers to suitable policy and energy supply options. Very often, the lack of such information and knowledge precludes countries from adopting new approaches in energy planning and technology applications. Internet-based information could assist such an exchange of information. [Assistance from developed to developing countries to develop information technologies is required.]

5. Mobilization of financial resources

28. Financial resources and mechanisms play a key role in the implementation of Agenda 21. In general, the financing for the implementation of Agenda 21 will come from a country's own public and private sectors. For developing countries, ODA is an important source of external funding and new and additional funding for sustainable development and energy for sustainable development and the implementation of Agenda 21 will be required. Hence, all financial commitments of Agenda 21, particularly those contained in chapter 33 and the provisions with regard to new and additional resources that are both adequate and predictable, need to be urgently fulfilled. Renewed efforts are essential to ensure that all sources of funding contribute to economic growth, social development and environmental protection in the context of sustainable development and the implementation of Agenda 21. Many Governments have initiated reforms to improve regulatory frameworks and institutional set-ups in order to attract private sector funding. Specific policies have been introduced to induce the flow of investment capital for energy technology for sustainable development. While more sustainable technologies often have lower operating costs than competing solutions, they sometimes require greater initial investments. Particular attention should therefore be paid to the difficulties of financing these essential infrastructure investments in developing countries. Financing from GEF, within its mandate, could also be considered in this context.

6. Making markets work [better towards sustainable development]

29. Driven by forces of competition, markets often do a better job than administered systems in allocating resources. But unless proper incentives are created, the marketplace fails to adequately account for the social and environmental cost of energy provision and use. Policies that reduce market distortions would give energy that is compatible with sustainable development a considerably better market position relative to current uses and practices. [Existing energy taxes in developed countries should be restructured to reflect their environmental pollution and damage.] Governments are encouraged to improve functioning of national energy markets in such a way that they support sustainable development and overcome market barriers. [Many countries are turning towards markets in order to develop energy production, distribution and consumption activities in order to harness the capital and expertise of private enterprises. More emphasis should be given to creating open and competitive energy markets within a regulatory framework which supports the goals of sustainable development. Unless proper

incentives and regulatory frameworks are implemented, markets alone cannot ensure broad access to energy for poor populations or the further introduction of environmentally sustainable technologies. Policies that reduce market distortions would constitute a first step towards sustainable development, by removing existing obstacles to renewable sources, energy efficiency measures, security of supply measures, adequate pollution control and new and advanced energy technologies.] Among other tools, Governments are encouraged to reduce and gradually eliminate subsidies for energy production and consumption that inhibit sustainable development. Governments should also promote environmental cost internalization. Due account should be given to the polluter pays principle.

[Governments should build on the strength of markets while addressing market limitations through selective markets regulations.]

7. Multi-stakeholder approach and public participation

30. Energy solutions that are compatible with sustainable development require the participation of all stakeholders and the involvement of the public at large. The capacity of community-based organizations and institutions including women's groups to facilitate participatory approaches to energy for sustainable development should be strengthened, taking into account principle 10 of the Rio Declaration on Environment and Development.

E. Regional cooperation

- 31. The Commission notes with appreciation the efforts made at the regional level and by interest groups to discuss the key issues and formulate regional positions and programmes of action to promote energy for sustainable development. It welcomes the statements that have resulted from these deliberations, recognizing that they provide valuable inputs to the work of the Commission. Moreover, it encourages the Governments in these regional deliberations to actively promote the implementation of the resulting programmes of action. In particular, the Commission recognizes the value of regional cooperation in achieving economies of scale in energy services for sustainable development.
- 32. From these statements, the Commission recommends implementation of the following regional and subregional endeavours, that may require subregional, regional, and international support:
- (a) Strengthening national and regional energy institutions or arrangements for enhancing regional and international cooperation on energy for sustainable development, in particular to assist developing countries in their domestic efforts to provide modern energy services to all sections of their populations by:
 - (i) Conducting in-depth studies to promote sustainable development in the energy sector in the region, including studies of the social, economic and environmental situation of the region and energy alternatives that support sustainable development;
 - (ii) Promoting training and exchange of experience regarding energy efficiency, renewable energy and advanced fossil fuel technologies and lessons learned:

- (iii) Strengthening regional networks of centres of excellence for the exchange of information and experience in the research, development and application of energy efficiency technologies, advanced fossil fuel and renewable energy;
- (iv) Strengthening and, where appropriate, establishing regional information and dissemination capabilities to provide information to the energy service industry concerning market opportunities and energy infrastructure and to consumers concerning the benefits of energy efficiency measures;
- (b) Promoting at the regional level rural electrification projects, including renewable energy technologies, and supporting local efforts to provide energy supplies to their basic infrastructures as well as integrating energy policies into overall rural development strategies, with emphasis on income generation, taking into account national circumstances;
- (c) Strengthening and facilitating, as appropriate, regional cooperation arrangements for promoting cross-border energy trade, including the interconnection of electricity grids and oil and natural gas pipelines;
- (d) Strengthening and, where appropriate, facilitating dialogue forums among regional, national and international producers and consumers of energy, and to that end the Commission complements the work of existing international energy forums:
- (e) Promoting, where appropriate, cooperation among the concerned countries of the region and with the support of the international organizations to improve the development and production of hydrocarbon fuels through integrated cost reduction, enhanced operational efficiency and the application of advanced and more environmentally sound technology;
- (f) Fostering regional cooperation when undertaking research, development and demonstration in the areas of energy efficiency, renewable energy and advanced fossil fuel technologies;
- (g) Encouraging regional cooperation for capacity-building, including South-South cooperation.

[F. International cooperation (*Turkey delete section*)

- 1. Message to other intergovernmental bodies (G77-China/Russian Federation/ Norway delete paras. 33-36; Australia/Norway streamline paras. 33-36; G77-China/Antigua and Barbuda expressed reservations)
 - 33. Like virtually no other issue, protection of the atmosphere primarily from the effects of energy production and use will continue to demand concerted international cooperation [(Canada delete) to arrest and hopefully reverse the negative impacts on the atmosphere]. Therefore, the Commission emphasizes the importance of achieving concrete agreements on the modalities of the implementation of the Kyoto Protocol, and urges the Conference of the Parties to the United Nations Framework Convention on Climate Change at its extended sixth session, in 2001, to continue its efforts to reach such agreements, and invites the Convention process, in particular the Conference of the Parties at its resumed sixth session, to [consider (Canada replace with) take note of)] the results and

recommendations on energy for sustainable development of this session of the Commission.

- 34. [(Canada delete) The World Summit on Sustainable Development, to be held in 2002, will further adjust the priorities for the implementation of Agenda 21 based on the evaluation of progress made in the decade since the United Nations Conference on Environment and Development in 1992. The Commission urges the Summit to give the issues related to energy priority and support or further strengthen the recommendations made here for the promotion of the achievement of the goals of energy for sustainable development. The Commission further invites the Summit to consider the follow-up to energy issues.]
- 35. The Commission, realizing that energy is a key ingredient of development, continues to promote efforts to meet the development needs of the least developed countries. Therefore, the Commission invites the Third United Nations Conference on Least Developed Countries in May 2001 to examine and support the implementation of the relevant recommendations made here.
- 36. As many of the recommendations made here require financial means, the results of the International Conference on Financing for Development, to be held in Mexico in 2002, will be particularly relevant. Therefore, the Commission urges the participants in the Conference to consider the special needs and circumstances of developing countries related to energy for sustainable development as specified here, and to provide guidance on how the necessary financing can be obtained.

2. Possible options for guidance to the multilateral system

- 37. [(G77-China delete) In order to effect improvements pursuant to the results of ninth session of the Commission on Sustainable Development on energy issues in the functioning, coherence and coordination of the United Nations system with regard to energy for sustainable development, the Commission:
- (a) [(Russian Federation/New Zealand delete) Invites the Secretary-General to include in his report to the World Summit on Sustainable Development options for [follow-up to energy issues in the United Nations system (Norway replace with) better coordination between existing organizations of the United Nations system with regard to energy for sustainable development]. [(EU add) These options should build on the deliberations on energy of the Commission on Sustainable Development at its ninth session to promote a common vision of the principles and elements of an integrated policy approach that will encourage progress towards a sustainable energy future, taking into account the responsibility of countries to develop policies, strategies and tools reflecting their particular economic, environmental and social needs and conditions. The Commission encourages national and regional preparations to contribute to the Summit];
- (b) [(Colombia to review; Canada/New Zealand delete) Recommends the strengthening of the existing mechanism by converting the Ad Hoc Inter-Agency Task Force on Energy, a subsidiary body of IACSD, into a regular body, with individual entities identified as task managers for specific aspects of energy and [(Russian Federation delete) invites it to elaborate concrete ways and

means to strengthen the role of the United Nations in the area of energy for sustainable development and] to submit these proposals for consideration by the Summit [(Norway replace with) for sustainable development] [(EU add) This body should be requested to elaborate on a common system-wide approach to energy within the United Nations system];

- (c) [(Canada/Russian Federation delete) Recommends, in order to further advance the dialogue on energy for sustainable development, as appropriate, within existing United Nations structures, that the Economic and Social Council examine the desirability and modalities of holding deliberations on energy in one of its segments of its upcoming sessions (United States replace with) Recommends, as appropriate, that the Economic and Social Council examine the desirability and modalities of holding deliberations on energy in one of its segments in an upcoming session in order to further advance the dialogue on energy for sustainable development within existing United Nations structures;]
- (d) [(Canada/Russian Federation/Norway delete) Recommends that the Economic and Social Council transmit to the General Assembly, as the supreme policy body of the United Nations, the outcome of its ninth session for further action by the General Assembly [(EU delete) under the agenda item devoted to energy within the cluster on sustainable development;]]
- (e) [(Russian Federation delete) Recommends that the Economic and Social Council invite the Committee on Energy and Natural Resources for Development to continue to contribute constructively to energy deliberations within the United Nations system;]
- (f) Invites Governments to use [(Norway add) the appropriate] existing United Nations mechanisms to continue the dialogue on issues related to sustainable energy, to share experiences on what works and what does not and promote shared learning and the exchange of best practices.
- [(g) (EU add) Urge international financial institutions (IFIs) and other multilateral organizations to integrate energy for sustainable development into their strategies and programmes to promote sustainable energy systems, infrastructure and projects, including energy efficiency and renewable energy-related investments in all economic sectors. IFIs should be urged to allocate resources to the development of energy policy in poverty reduction strategy papers, and to develop innovative financing models, such as microcredit lines, with special emphasis on the needs of the least developed countries.]

3. International endeavours

38. [(EU delete) The Commission recommends the following new actions and actions for heightened activity for international cooperation [(G77-China add) supporting the international endeavours regarding equal access and opportunities for women through provision of credit facilities and involvement in energy policy decision-making processes.]]

(EU actions 6 and 7 and last sentences of actions 12 and 13 should be combined into a single action dealing with the need for better cooperation, coordination and sharing of information among existing institutions)

- 1. [(G77-China delete) Continuing and] enhancing development cooperation, [(G77-China delete) as well as South-South cooperation, to assist developing countries in establishing and implementing their national policy frameworks in support of energy for sustainable development.]
- 2. [(United States delete) Governments of [industrialized (G77-China replace with) developed] countries [which have not yet fulfilled the commitments undertaken (Australia replace with) should strive] to reach the agreed United Nations target of 0.7 per cent of [GNP for ODA, to do so as soon as possible (Australia replace with) GDP to be given as ODA.]]
- 3. [(Canada/Russian Federation delete) In the interest of achieving market stability, the ongoing dialogue between producers and consumers of energy should be strengthened. Furthermore other regional and international dialogues on energy issues among various stakeholders should be enhanced.]
- 4. [Exploring ways (G77-China replace with) Stabilizing mechanisms] to [increase financing support for (United States replace with) maximize existing financial resources and create innovative financing solutions to support] energy for sustainable development, including through [(G77-China add) debt cancellation, facilitating foreign investment, provision of ODA at internationally agreed targets] the incorporation of energy for sustainable development considerations in development cooperation programmes and [(G77-China delete) through the lending policies and] programme activities of IFIs. In this context, consideration should also be given to how [(G77-China add) inter alia] ODA can be best used to leverage private funds for the development of energy solutions that are compatible with sustainable development.
- 5. [(Canada/Norway/Saudi Arabia delete) Launching a natural gas exploration and development initiative] [(Tonga add) including funding for geothermal projects] [(Saudi Arabia add) explicitly for developing countries], in particular for least developed countries, financed through appropriate mechanisms.] [(Australia/Russian Federation elaborate) appropriate mechanisms needed to launch natural gas exploration and development initiative for least developed countries.]]
- 6. [(EU merge actions 6, 7, 12 (last sentence) and 13 (last sentence); Canada delete) Establishing a network of CGIAR-type centres of excellence by linking qualified national energy centres into a network [(Norway replace with) Promoting networking between qualified national and regional energy centres] focusing on energy technologies for sustainable development.]
- 7. [Establishing an [(Canada replace with) Exploring with existing] [international (United States replace with) regional] energy information centre or clearing house that could support and promote capacity-building [(United States add) and technology transfer] activities for [sustainable energy development (G77-China replace with) energy for

sustainable development] by improving accessibility to and availability of relevant information.] [(Australia replace with) Establishing an international resource of policy options which can be accessed by all countries, aimed at capacity-building, in particular offering policy options for developing appropriate enabling environments for private sector energy resource infrastructure investments.]

[(Australia/Norway add) 7. bis Further developing the potential of facilitation action teams, such as those being tried by APEC in Thailand and Peru, for capacity-building, and to assist in implementation of policy options, where deemed appropriate.]

- 8. Promoting international public-private partnership cooperation programmes [(G77-China delete) along the lines of the recently initiated global compact] for promoting the next generation of energy efficient, cleaner fossil fuel and renewable energy technologies.
- 9. Promoting decentralized energy market transformation for sustainable energy systems with a focus on rural areas and rural electrification.
- 10. [(EU redraft) Actions to transfer appropriate advanced and cleaner fossil fuel technologies to developing countries, with special provisions for the least developed countries, and to strengthen their capacity for acquisition of know-how and expertise, including South-South cooperation in sharing experience concerning the successful implementation of cleaner energy assistance programmes]. [(Australia add) 10. bis Adequate infrastructure to support the implementation of clean energy programmes will be assisted by the creation of an enabling environment to promote investment in the transfer, production and maintenance of these technologies.]
- 11. [The [expansion (Norway replace with) enhanced use] of existing (Canada replace with) Use of] international mechanisms [(Canada/Norway delete) or development of new mechanisms] to identify risks and ensure they are managed on a transparent basis [(Canada delete) and with an effective and equitable partnership between investors and host countries, for those developing countries that do not have institutional structures that are adequately prepared to deal with the scale of risk associated with major energy investments].
- 12. Strengthening of the existing mechanism and the United Nations involvement in facilitating and financing, on favourable terms in line with Agenda 21, access to and the transfer of environmentally sound technologies and corresponding know-how, [(G77-China delete) that are available mostly in the industrialized countries but also in some developing countries. Technology networking using low-cost modern communication interconnections could facilitate information-sharing to promote technology transfer in the renewable energy and clean fossil fuel technologies through international and regional cooperation].
- 13. Strengthening of existing mechanisms in the United Nations system to promote technology transfer for [(G77-China add) energy efficiency

- and] [(Canada/Norway delete) renewable] [(United States replace with) more environmentally sound] energy technologies [(Norway add) for sustainable development] by organizing a data bank on application technologies, training experts [(Canada delete) transferring of technology] and facilitating the free exchange of international information on these technologies.
- 14. Fostering international cooperation in undertaking research and development on [(Canada add) all aspects of] energy efficiency, renewable energy, advanced fossil fuels [(Canada add) and nuclear] technologies.
- 15. [(Canada delete) Creating partnerships between industrialized countries with ongoing research, development and demonstration efforts in the area of advanced fossil fuel technologies [(Saudi Arabia delete) with] [near-zero (United States replace with) lowered] emissions, and fossil fuel rich developing countries], to speed up the dissemination of knowledge on these technologies and to allow realistic evaluation and application of those technologies in different regions.]
- 16. [(EU redraft) Provision of soft loans by the international lending institutions to Governments for sharing the cost of the development of rural energy infrastructures with private sector investors.]]

II. Co-Chairpersons' summary of the proceedings

- 2. At its second session, the Ad Hoc Open-ended Intergovernmental Group of Experts on Energy and Sustainable Development focused on substantive discussion and negotiation on the basis of the draft negotiating text prepared and tabled by the Co-Chairpersons on 29 January 2001 (E/CN.17/ESD/2001/L.1). During the first two days of the session, general views were heard before proceeding to a first round of discussions on the text.
- 3. A second round of discussions on the text was facilitated by compilation texts, prepared with the assistance of the Department of Economic and Social Affairs of the United Nations Secretariat. Compromise proposals orally presented by the Co-Chairpersons enabled delegations to reach consensus on most paragraphs. On some paragraphs, divergent views persisted on some issues, in particular on financing issues, the concept of shared goals, (indicative) targets or indicators and the role and functioning of markets; these divergences of view are indicated in the customary way in the final negotiated text.
- 4. Concerning the fifth key issue in the draft negotiating text relating to nuclear energy technologies, extensive informal consultations were conducted by Co-Chairperson Salamat with interested parties. Based on these informal consultations, Co-Chairperson Salamat proposed a compromise text on 2 March 2001 that was regarded by all delegations who took the floor as a good basis for further discussion. Given the lateness of the hour and the inability of delegations to seek instructions on this very sensitive matter from their capitals, the Group decided to transmit the Co-Chairpersons' proposal, in brackets, to the Commission at its ninth session for further discussion and appropriate action.

- 5. Concerning section F of the draft negotiating text, entitled "International cooperation", delegations expressed views in a first reading on 27 February 2001 and in a round of informal exchanges on 28 February 2001. The views ranged from a preference to delete most of that section to wishing to retain it in its entirety, as proposed by the Co-Chairpersons. Since a number of speakers felt that it would be desirable to revisit the issue of international cooperation at the ninth session of the Commission, when all delegations could also benefit from the presence of international relations experts, in addition to experts on energy and sustainable development, the Group decided to transmit section F in compilation form to the Commission, for further discussion and appropriate action at its ninth session.
- 6. The Group decided to transmit a draft decision in the form of a negotiated text, containing unagreed text in bracketed bold type, for consideration and appropriate action by the Commission at its ninth session (see sect. I, draft decision).
- 7. With the transmission to the Commission of its report, which contains, as recommended by the Bureau of the ninth session of the Commission, a draft decision for consideration by the Commission and the present Co-Chairpersons's summary of the discussion, the Co-Chairpersons deem that the Group has faithfully and constructively fulfilled the mandate entrusted to it by the General Assembly at its nineteenth special session to prepare the work of the ninth session of the Commission on energy issues. Given the positive spirit in which the second session of the Group closed, the Co-Chairpersons trust that delegations will be sufficiently flexible at the ninth session of the Commission to allow for successful resolution of the remaining bracketed portions of the text.
- 8. The Co-Chairpersons will be prepared to conduct any further consultations on the text that might be needed during the ninth session of the Commission with a view to removing existing brackets from the text, should the Chairman of the ninth session of the Commission deem this appropriate and useful for resolving the outstanding issues in this respect.

III. Adoption of the report

9. At its 2nd meeting, on 2 March 2001, the Group of Experts adopted the report as orally corrected and took note of the Co-Chairperson's summary of the proceedings (see sect. II).

IV. Organizational and other matters

A. Opening and duration of the session

- 10. The Ad Hoc Open-ended Intergovernmental Group of Experts on Energy and Sustainable Development of the Commission on Sustainable Development met in New York from 26 February to 2 March 2001, in accordance with Economic and Social Council decision 1999/280. The Group held two meetings (1st-2nd meetings) and a number of informal meetings.
- 11. The session was opened by Mohammad Reza Salamat of the Islamic Republic of Iran, Co-Chairperson of the Group of Experts. The Co-Chairperson made a statement.

- 12. The Director of the Division for Sustainable Development of the United Nations Secretariat made an introductory statement.
- 13. Irene Freudenschuss-Reichl of Austria, Co-Chairperson of the Group, introduced the draft negotiating text that had been submitted by the Co-Chairpersons (E/CN.17/ESD/2001/L.1).

B. Agenda and organization of work

- 14. At its 1st meeting, on 26 February, the Group of Experts adopted its provisional agenda (E/CN.17/ESD/2001/1) and organization of work (E/CN.17/ESD/2001/Add.1). The agenda was as follows:
 - 1. Adoption of the agenda and other organizational matters.
 - Consideration of the key issues of energy for sustainable development, with due consideration given for each issue to the means of implementation: capacity-building, technology transfer and financial resources:
 - (a) Accessibility of energy;
 - (b) Energy efficiency;
 - (c) Renewable energy;
 - (d) Advanced fossil fuel technologies;
 - (e) Nuclear energy technologies;
 - (f) Rural energy;
 - (g) Energy-related issues in transportation.
 - 3. Regional initiatives and endeavours.
 - 4. Learning from each other: success stories in the promotion of energy for sustainable development.
 - 5. Enhancing international cooperation for energy for sustainable development.
 - 6. Adoption of the report of the Group of Experts on its second session.

C. Attendance

15. The session was attended by representatives of 39 States members of the Commission on Sustainable Development. Observers for other States Members of the United Nations and for the European Community, representatives of organizations of the United Nations system and secretariats of treaty bodies, as well as observers for intergovernmental and non-governmental organizations, also attended (see annex).

D. Documentation

- 16. The Group of Experts had before it the following documents:
 - (a) Provisional agenda (E/CN.17/ESD/2001/1);
 - (b) Proposed programme of work (E/CN.17/ESD/2001/1/Add.1);
 - (c) Report of the Secretary-General entitled "Energy and sustainable development: options and strategies for action on key issues" (E/CN.17/ESD/2001/2);
 - (d) Letter dated 16 January 2001 from the Permanent Representative of Austria addressed to the Secretary-General (E/CN.17/2001/7);
 - (e) Letter dated 31 January 2001 from the Chargé d'affaires a.i. of the Permanent Mission of the Solomon Islands to the United Nations and Chairman of the Pacific Islands Forum countries represented at the United Nations addressed to the Secretary-General (E/CN.17/2001/9);
 - (f) Letter dated 29 January 2001 from the Permanent Representative of Indonesia addressed to the Secretary-General (E/CN.17/2001/10 and Corr.1);
 - (g) Letter dated 2 February 2001 from the Permanent Representative of Samoa to the United Nations and Chairman of the Alliance of Small Island States addressed to the Secretary-General (E/CN.17/2001/11);
 - (h) Background document entitled "Energy and sustainable development: case studies";
 - (i) Draft decision submitted by the Co-Chairpersons (E/CN.17/ESD/2001/L.1);
 - (j) Draft report (E/CN.17/ESD/2001/L.2).

Annex

List of participants

States members of the Commission on Sustainable Development

Algeria: Abadallah Baali, Ali Redjel, Messaoud Boumaour

Angola: Jose Patricio, Margarida Izata, Francisco de Sousa Talimo

Australia: Robert Alderson, Guy O'Brien

Belarus: Sergei Ling, Uladzimir Vantsevich, Alexei Rayman, Andrei Popov

Belgium: Nadine Gouzée, Günther Sleeuwagen, Ulrich Lenaerts, Jean-

Paul Charlier

Bolivia:

Brazil: Marcio Nunes, Antonio Sergio Lima Braga, Maria Luisa Escorel

de Moraes

Cameroon:

China: Sun Zhen, Liu Deshun, Zhang Megheng, Zhang Xiaoan,

Chen Zhenlin, Shi Weiqiang, Wang Ling

Colombia: Alfonso Valdivieso, Andrea Alban, Mauricio Baquero

Côte d'Ivoire: Noel-Emmanuel Ahipeaud Guebo, Gaston K. Yao, Eddy Simon

Cuba: Bruno Rodríguez Parrilla, Rafael Dausá Cespedes, Ileidis L. Valiente

Diaz, Teresita Borges, Mercedes Mostelier, Antonio Villasol, Pedro

Abella, Hilda Ortiz Garcia

Sin Song Chol, Rim Song Chol

Czech Republic: Jan Kára, Jaroslav Maroušek

Democratic Peoples Republic of Korea:

Democratic Republic of the Congo:

Denmark: Dan Nielsen, Ruben Madsen, Thomas Becker, Peter Gebert, Thure

Christiansen, Vivi Yen Kow, Mikael Kvetny

France: Daniel Brun, Bernard Devin, Edgard Balustein, Michel Hamelin,

Genevieve Verbrugge, Daniel Le Gargasson, Laurence Vuillaume

Germany: Martin Lutz, Franzjosef Schafhausen, Reinhard Krapp Manfred

Konukiewitz, Antonio Pflüger, Gert Kemper Wolfgang Müller,

Bernhard Bösl

Greece: Elias Gounaris, Dionyssios Kalamvrezos, Alexios-Marios

Lyberopoulos, Dimitrios Lalas, El. Georgopoulou

Guatemala: Gert Rosenthal, Silvia Corado

Guyana: Alison Drayton, George Talbot

Hungary: Zita Geller, Sandor Mózes

Iran (Islamic Republic of): Bagher Asadi, Ali Pirkoohi, Mohammad Reza Salamat, Hussein

Moeeni, Mohsen Esperi

Italy: Sergio Vento, Pier Benedetto Francese, Guglielmo Ardizzone,

Giovanni Brauzzi, Fabio Cassese, Massimo Cozzone, Alessandro

Morici, Paolo Angelini, Giovannino Di Palma

Japan: Koichiro Seki, Masatoshi Sato, Jyotaro Horiuchi, Kazuo Yagi,

Kazuhiko Kokubu, Shunichi Nakada, Toru Nagayama, Ko Koiso, Kotaro Kawamata, Toshiyuki Masui, Kuniko Uchida, Naomasa

Murakoshi

Kazakhstan: Madina B. Jarbussynova

Lebanon:

Madagascar:

Mali: Solomani Diakite, Ismail Toure

Mauritania:

Mauritius:

Mexico: Jorge Eduardo Navarrete, Carlos Alberto Garcia Moreno Castelazo,

José Adolfo Gonzalez-Martinez, Jose Ramon Lorenzo

Mozambique: Carlos dos Santos, Nuno Tomas

Netherlands: Pieter Verbeek, Daniel Pietermaat, Ralph Brieskorn, Alexandra

Valkenburg, Wim C. Turkenburg

New Zealand: Don Mackay, Trevor Hughes, Mark Ramsden Grant Robertson

Nicaragua:

Pakistan: Shamshad Ahmad, Aizaz Ahmad Chaudhry, Imrain Ahmad Siddiqui

Paraguay:

Peru:

Philippines:

Poland: Leszek Banaszak, Renata Cybulska-Witkiewicz

Portugal:

Republic of Korea:

Russian Federation: Y. N. Isakov, B. F. Reutov, E. G. Bessonov, D. I. Maximichev,

S. F. Bulgachenko

Spain: Inocencio F. Arias, Arturo Spiegelberg, Manuel Gomez-Acebo,

Francisca Rivero

Sri Lanka: John de Saram, Ranjith Uvangoda, Weerasekera Mudiyanselage

Bandusena, M. R. K. Lenagala, G. B. A. Fernando

Sudan:

Thailand: Kulkumut Singhara Na Ayudhaya, Sonti Vannasaeng, Boonrod

Sajjakulnukit, Praseert Sinsukprasert, Suvat Soopatanapong

The former Yugoslav

Naste Calovski, Violeta Keckarovska, Donka Gligorova, Goran

Republic of Macedonia: Stevcevski

Tunisia: Nejib Osman

Uganda: Matia Mulumba Semakula Kiwanuka

United Kingdom of Great Britain and Northern Mark Runacres, Ian Symons, Andrew Randall, Stephen Lowe,

Michael Massey, Richard Jones

United States of America:

Ireland:

Jonathan Margolis, Griffin Thompson, Mark G. Hambley, William Breed, John Davison, Patrick Dunn, Janet M. Gorn, Lisa Hanle, Elmer Holt, John Kavanagh, Duncan Marsh, Marina Morgenegg, David Moses, Raymond Prince, Daniel Rochberg, Arthus Rypinski, Cynthia Saddy, Claudia Serwer, Ann Stewart, Alfreda Meyers, James

Adams

States Members of the United Nations represented by observers

Antigua and Barbuda, Argentina, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Benin, Burkina Faso, Cambodia, Canada, Chile, Cyprus, Dominican Republic, Egypt, Ethiopia, Finland, Ghana, Georgia, Haiti, Honduras, Iceland, India, Indonesia, Iraq, Jordan, Kyrgyzstan, Lao People's Democratic Republic, Liechtenstein, Malta, Monaco, Mongolia, Morocco, Nauru, Nigeria, Norway, Panama, Qatar, Saint Lucia, Samoa, Saudi Arabia, South Africa, Sweden, Syrian Arab Republic, Tonga, Trinidad and Tobago, Ukraine, United Republic of Tanzania, Venezuela, Zambia, Zimbabwe

* * *

Entities represented by observers

European Community

Non-member States of the United Nations maintaining permanent observer missions at Headquarters

Holy See, Switzerland

Specialized agencies and related organizations

Food and Agriculture Organization of the United Nations, United Nations Educational, Scientific and Cultural Organization, World Bank, World Meteorological Organization, United Nations Industrial Development Organization, International Atomic Energy Agency

Intergovernmental organizations

International Federation of Red Cross and Red Crescent Societies at the United Nations, International Organization of la Francophonie

United Nations and related bodies

Economic Commission for Europe, Economic and Social Commission for Asia and the Pacific, United Nations Development Programme, United Nations Environment Programme, Global Environment Facility