Article 19 – Environmental Aspects

General comments and notes

In May 1993, Chairman noted that there was general agreement on the Article (ECT 2, CONF 56). Negotiations in the Plenary finished in June 1993 (ECT 3, CONF 60).

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A new provision has been added to Article 24 making it clear that the provisions of that Article do not apply to disputes arising from Article 14.

Russian Federation scrutiny reserve pending Russian translation.

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The redraft of this Article expresses the outcome of negotiations by an Ad-Hoc Sub-Group on 11 November 1992 taking into account Terms of Reference as indicated in BA-22 and the USA memorandum on various expressions as contained in BA-24. Discussion was based on the premise that Article 14 will not be subject to binding arbitration. Switzerland and Austria delegations expressed their strong reservations on this assumption. The Chairman shall redraft the chapeau to more elegant form while retaining the substance unchanged.

USA general reserve.

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To be able to conduct further negotiation of this Article Chairman adopted Working hypotheses based on the following assumptions:

1) precautionary and pollution pay principles shall be mentioned in the chapeau;
2) the chapeau (third sentence) will use the word: “shall”;
3) Article 14 will not be subject to binding arbitration.

CH delegation expressed its strong reservation on item 3.

USA will submit a Memorandum on various expressions used in Article 14 to the Secretariat by 30 October 1992 for circulation.

The Chairman established ad hoc Sub-Group on Article 14 which shall meet probably on 16 or 17 November 1992. The Sub-Group is opened for any delegation which desires to participate. The WGII on 20 October 1992 adopted following Terms of Reference for Sub-Group on Article 14:
1) To examine on the basis of a memorandum from the USA the concepts involved in the following expressions in Article 14.

List of expressions:

Chapeau, 6th line: “in an economically sound manner”
10th line: “cost-effective”

Subpara c, 2nd line: “most cost-effective way”
2nd & 3rd line: “maximize general social benefits”
(F.N. 14.12)

Subpara d, 2nd line: “in an economically acceptable way”
4th & 5th line: “economic development and use”

Subpara e, 2nd line: “economically efficient”

Subpara f, 2nd line: “energy efficient”
5th line: “cost effectively”
F.N. 14.18: “overall maximalization of net benefits”

2) To make recommendations to WG II on the expression to use when different expressions are used to express the same concept; to identify any occasions where the same expression is used to cover different concepts and make recommendations to remove any resulting ambiguity.

3) To propose to WG II in relation to these expressions and the concepts they relate to formulations designed to facilitate as much consensus as possible among the negotiating parties.

USA general reserve.

BA-15 (12/08/92)
Article 14 – Environmental Aspects

The new text is the chairman’s compromise mainly based on contributions recorded in BA-14.

BA 14 (24/06/92)
BA-13 (19/06/92)
Article 14 – Environmental Aspects

The whole article is pending considerations in capitals. The Secretariat has received Norway and USA new proposals on this Article. Since the suggested changes are rather extensive they are not split into footnotes on each subparagraphs but for reasons of clarity included in full

Norway proposal

1) The Contracting Parties shall minimize harmful effects on the environment of all aspects of the Energy Cycle in a safe, economically and environmentally sound manner in order to move towards sustainable development. To this end they shall:

(a) ensure that environmental impacts are taken account of when formulating and implementing their energy policies, including an appropriate mix of policy instruments;
(b) establish markets which facilitate a more fully internalisation in energy prices of environmental costs and benefits that occur in the country itself and in the case of transboundary pollution in other countries;

(c) through international cooperation and by harmonising measures as appropriate, take into account the differences in environmental impacts and abatement costs between countries when internalising environmental costs;

(d) implement policies that minimize in an economically acceptable way the negative environmental Impacts of the Energy Cycle having particular regard to the encouragement of a wider use of renewable sources;

(e) promote the dissemination of information on environmentally sound energy policies, practices and technologies to promote public awareness among consumers on environmental Impacts of their behaviour in relation to energy use and consult with each other on how to promote such awareness most effectively;

(f) encourage favourable conditions for the transfer and dissemination of information on technology which will reduce harmful environmental impacts of all aspects of the Energy Cycle;

(g) promote the use of the most energy efficient environmentally benign technologies that are Economically viable;

(h) promote the transparent assessment of environmental impacts of energy Investments projects at an appropriate stage and ensure transparency within their legal and administrative framework;

(i) implement appropriate research and development activities including with respect to renewable energy sources and the internalisation of environmental costs in the energy prices;

(j) promote internationally awareness and information exchange on Contracting Parties' environmental programs and standards that relate to the energy sector and on the Implementation of these programs and standards;

2) Actions of the Contracting Parties relating to the environment shall be based on the precautionary principle and the polluter pay principle and that environmental damage should as a priority be rectified at source.

3) The Contracting Parties shall ensure consistency between their energy policies and international agreements to which they are parties and ensure cooperation in order to assess and implement cost effective policy options to achieve joint objectives of energy efficiency and environmental protection.
Norway explanatory notes

In Norway’s opinion certain principles and issues of general nature must be reflected in Article 14. These are:

- the precautionary principle,
- the polluter pay principle,
- the principle of internalisation of environmental cost in energy prices,
- the allowance for differences in the scale of environmental cost coverage in energy prices due to differences in environmental impacts of the energy system and related abatement cost between countries,
- cooperation to allow for cost-effective measures to be undertaken across sectors and national boundaries,
- Information exchange on relevant issues.

In sub-paragraph 1(c) Norway mentions the need for international cooperation on the issue of internalising environmental cost in energy prices. This does not however necessarily mean that Norway suggests the establishment of a new body or Institution.

Environmental issues relating to the energy sector have a central part in the Energy Charter. Norway hence emphasizes the need to reflect environmental issues both in the Basic Agreement and in the different sector protocols. Norway position on how to deal with these issues is as follows: Environmental issues of principal and general nature should be dealt with in the Basic Agreement. More sector specific environmental issues should be dealt with in the relevant sector protocols. Other environmental issues which are common to more than one sector protocol should be dealt with in the protocol on "Energy Efficiency and Environmental Aspects of Energy Systems".

USA proposal

1) The Contracting Parties shall strive to limit harmful effects on the environment of all aspects of the Energy Cycle in an economically sound manner. To this end each Contracting Party should seek to take into account, in accordance with its domestic policy and consistent with its other international obligations, the following general principles with regard to environmental aspects of their domestic energy systems. Contracting Parties are encouraged to cooperate with a view to implementing these general obligations:

   (a) consider environmental concerns through the formulation and implementation of their energy policies including an appropriate mix of policy Instruments;

   (b) promote market-price formation in the energy sector and promote research in appropriate fora on methods to quantify and appropriately recognize environmental costs and benefits;

   (c) promote national energy policies that reduce in an economically acceptable way negative environmental impacts;

   (d) promote the dissemination of information on environmentally sound and economically efficient energy policies practices and technologies in order to increase public awareness of the environmental Impacts of energy use and ways to reduce adverse impacts and consult with each other on how to promote such awareness most effectively;
(e) encourage favorable conditions for the commercial transfer and dissemination of technology which will reduce harmful environmental impacts of all aspects of the Energy Cycle taking account of the need for adequate and effective protection of Intellectual Property rights,

(f) encourage the formulation and implementation of policies that foster innovation in the research and development of environmentally sound and economically efficient energy technologies, including renewable energy resources;

(g) promote transparency in assessment programs of environmental impacts of their energy Investment at an early stage;

(h) promote internationally awareness and information exchange on Contracting Parties' environmental programs and standards that relate to the energy sector and on the implementation of these programs and standards.

2) Contracting Parties should, where feasible and economically justified, seek to adopt precautionary approaches to environmental problems associated with energy systems and to rectify such problems at the source.

**USA explanatory notes**

The draft seeks to preserve the spirit and thrust of the current text, but to resolve certain problems and awkward formulations that had been noted during review in Washington. Specifically:

1) A revised chapeau makes clear that the obligations are of a general, rather than specific nature, that they pertain to energy and the environment and that they are not meant to condition the Parties' obligations contracted in environmental policy fora.
   b) Combines the intent of (b) and (h) of current draft. Emphasizes the need for research In the area of appropriate, non-trade distorting methods of Internalizing environmental costs in price formation.
   c) As revised, encourages the Parties to promote domestic policies that reduce negative environmental Impacts. Original wording raises serious sovereignty and trade concerns about the mechanisms needed to fulfil these requirements.
   d) Labelling schemes best considered a trade Issue.
   e) Encourages research Into appropriate technologies, including renewable energy sources.
   f) Former (i)

2) Emphasizes adoption of precautionary approaches to problems associated with energy systems rather than the broad environmental statement that included “precautionary principle” and “polluter pays”. The revised version is consistent with language in the Framework Convention on Climate Change.

3) Eliminated. Paragraph in the current draft could be interpreted to mean this agreement must be consistent with international environmental agreements. Basic Agreement should be squarely focused on trade and investment issues, with general parameters on environmental issues to serve as guiding principles. Specifics should be left to international environmental agreements.
The whole Article is pending considerations in capitals.

New Article redrafted by Chairman on basis of Switzerland suggestion. Scrutiny reserve by all delegations. The substance and need for such an Article supported by Austria, Netherlands, USA.
In pursuit of sustainable development and taking into account its obligations under those international agreements concerning the environment to which it is party, each Contracting Party shall strive to minimize in an economically efficient manner harmful Environmental Impacts occurring either within or outside its Area from all operations within the Energy Cycle in its Area, taking proper account of safety. In doing so each Contracting Party shall act in a Cost-Effective manner. In its policies and actions each Contracting Party shall strive to take precautionary measures to prevent or minimize environmental degradation. The Contracting Parties agree that the polluter in the Areas of Contracting Parties, should, in principle, bear the cost of pollution, including transboundary pollution, with due regard to the public interest and without distorting Investment in the Energy Cycle or international trade. Contracting Parties shall accordingly:

(a) take account of environmental considerations throughout the formulation and implementation of their energy policies;

(b) promote market-oriented price formation and a fuller reflection of environmental costs and benefits throughout the Energy Cycle;

(c) having regard to Article 34(4), encourage co-operation in the attainment of the environmental objectives of the Charter and co-operation in the field of international environmental standards for the Energy Cycle, taking into account differences in adverse effects and abatement costs between Contracting Parties;

(d) have particular regard to Improving Energy Efficiency, to developing and using renewable energy sources, to promoting the use of cleaner fuels and to employing technologies and technological means that reduce pollution;

(e) promote the collection and sharing among Contracting Parties of information on environmentally sound and economically efficient energy policies and Cost-Effective practices and technologies;

(f) promote public awareness of the Environmental Impacts of energy systems, of the scope for the prevention or abatement of their adverse Environmental Impacts, and of the costs associated with various prevention or abatement measures;

(g) promote and cooperate in the research, development and application of energy efficient and environmentally sound technologies, practices and processes which will minimize harmful Environmental Impacts of all aspects of the Energy Cycle in an economically efficient manner;
(h) encourage favourable conditions for the transfer and dissemination of such technologies consistent with the adequate and effective protection of Intellectual Property rights;

(i) promote the transparent assessment at an early stage and prior to decision, and subsequent monitoring, of Environmental Impacts of environmentally significant energy investment projects;

(j) promote international awareness and information exchange on Contracting Parties' relevant environmental programmes and standards and on the implementation of those programmes and standards;

(k) participate, upon request, and within their available resources, in the development and implementation of appropriate environmental programmes in the Contracting Parties.

Understanding 13 (with respect to Article 19(1)(i))

It is for each Contracting Party to decide the extent to which the assessment and monitoring of Environmental Impacts should be subject to legal requirements, the authorities competent to take decisions in relation to such requirements, and the appropriate procedures to be followed.

Interim text (25/06/94)

Article 22.1 – Environmental Aspects

Understanding 14 – to Article 22(1)(i)

In pursuit of sustainable development and taking into account its obligations under those international agreements concerning the environment to which it is party, each Contracting Party shall strive to minimize in an economically efficient manner harmful Environmental Impacts occurring either within or outside its Area from all operations within the Energy Cycle in its Area, taking proper account of safety. In doing so each Contracting Party shall act in a Cost-Effectively manner. In its policies and actions each Contracting Party shall strive to take precautionary measures to prevent or minimize environmental degradation. They The Contracting Parties agree that the polluter in the Areas of Contracting Parties, should, in principle, bear the cost of pollution, including transboundary pollution, with due regard to the public interest and without distorting Investment in the Energy Cycle or international trade. Contracting Parties shall accordingly:

(a) take account of environmental considerations throughout the formulation and implementation of their energy policies;

(b) promote market-oriented price formation and a fuller reflection of environmental costs and benefits throughout the Energy Cycle;

(c) having regard to Article 39(4), encourage cooperation in the attainment of the environmental objectives of the Charter and cooperation in the field of international environmental standards for the Energy Cycle, taking into account differences in adverse effects and abatement costs between Contracting Parties;
(d) have particular regard to Improving Energy Efficiency, to developing and using renewable energy sources, to promoting the use of cleaner fuels and to employing technologies and technological means that reduce pollution;

(e) promote the collection and sharing among Contracting Parties of information on environmentally sound and economically efficient energy policies and Cost-Effective practices and technologies;

(f) promote public awareness of the Environmental Impacts of energy systems, of the scope for the prevention or abatement of their adverse Environmental Impacts, and of the costs associated with various prevention or abatement measures;

(g) promote and cooperate in the research, development and application of energy efficient and environmentally sound technologies, practices and processes which will minimize harmful Environmental Impacts of all aspects of the Energy Cycle in an economically efficient manner;

(h) encourage favourable conditions for the transfer and dissemination of such technologies consistent with the adequate and effective protection of Intellectual Property rights;

(i) promote the transparent assessment at an early state and prior to decision, and subsequent monitoring, of Environmental Impacts of environmentally significant energy investment projects;

(j) promote international awareness and information exchange on Contracting Parties' relevant environmental programmes and standards and on the implementation of those programmes and standards;

(k) participate, upon request, and within their available resources, in the development and implementation of appropriate environmental programmes in the Contracting Parties.

Understanding 14 (with respect to Article 22(1)(i))

It is for each Contracting Party to decide the extent to which the assessment and monitoring of Environmental Impacts should be subject to legal requirements, the authorities competent to take decisions in relation to such requirements, and the appropriate procedures to be followed.

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In pursuit of sustainable development and taking into account its obligations under those international agreements concerning the environment to which it is party, each Contracting Party shall strive to minimize in an economically efficient manner harmful environmental impacts occurring either within or outside its Area from all operations within the energy cycle in its Area, taking proper account of safety. In doing so each Contracting Party shall act cost-effectively. In its policies and actions each Contracting Party shall strive to take precautionary measures to prevent or
minimize environmental degradation. They agree that the polluter in the Areas of Contracting Parties, should, in principle, bear the cost of pollution, including transboundary pollution, with due regard to the public interest and without distorting Investment in the energy cycle or international trade.

Contracting Parties shall accordingly:

(a) take account of environmental considerations throughout the formulation and implementation of their energy policies;

(b) promote market-oriented price formation and a fuller reflection of environmental costs and benefits throughout the energy cycle;

(c) having regard to Article 39(4), encourage cooperation in the attainment of the environmental objectives of the Charter and cooperation in the field of international environmental standards for the energy cycle, taking into account differences in adverse effects and abatement costs between Contracting Parties;

(d) have particular regard to improving energy efficiency, to developing and using renewable energy sources, to promoting the use of cleaner fuels and to employing technologies and technological means that reduce pollution;

(e) promote the collection and sharing among Contracting Parties of information on environmentally sound and economically efficient energy policies and cost-effective practices and technologies;

(f) promote public awareness of the environmental impacts of energy systems, of the scope for the prevention or abatement of their adverse environmental impacts, and of the costs associated with various prevention or abatement measures;

(g) promote and cooperate in the research, development and application of energy efficient and environmentally sound technologies, practices and processes which will minimize harmful environmental impacts of all aspects of the energy cycle in an economically efficient manner;

(h) encourage favourable conditions for the transfer and dissemination of such technologies consistent with the adequate and effective protection of intellectual property rights;

(i) promote the transparent assessment at an early state and prior to decision, and subsequent monitoring, of environmental impacts of environmentally significant energy investment projects;

(j) promote international awareness and information exchange on Contracting Parties' relevant environmental programmes and standards and on the implementation of those programmes and standards;

(k) participate, upon request, and within their available resources, in the development and implementation of appropriate environmental programmes in the Contracting Parties.
Understanding 14 / Ministerial declaration 12 (with respect to Article 22(1)(i))

It is for each Contracting Party to decide the extent to which the assessment and monitoring of Environmental Impacts should be subject to legal requirements, the authorities competent to take decisions in relation to such requirements, and the appropriate procedures to be followed.

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In pursuit of sustainable development and taking into account its obligations under those international agreements concerning the environment to which it is party, each Contracting Party shall strive to minimise in an economically efficient manner harmful environmental impacts occurring either within or outside its Area from all operations within the energy cycle in its Area, taking proper account of safety. In doing so each Contracting Party shall act cost-effectively. In its policies and actions each Contracting Party shall strive to take precautionary measures to prevent or minimise environmental degradation. They agree that the polluter in the Areas of Contracting Parties, should, in principle, bear the cost of pollution, including transboundary pollution, with due regard to the public interest and without distorting Investment in the energy cycle or international trade. Contracting Parties shall accordingly:

(a) take account of environmental considerations throughout the formulation and implementation of their energy policies;

(b) promote market-oriented price formation and a fuller reflection of environmental costs and benefits throughout the energy cycle;

(c) having regard to Article 39(4), encourage cooperation in the [DL]¹ attainment of the environmental objectives of the Charter and cooperation in the field of international environmental standards for the energy cycle, taking into account differences in adverse effects and abatement costs between Contracting Parties;

(d) have particular regard to improving energy efficiency, to developing and using renewable energy sources, to promoting the use of cleaner fuels and to employing technologies and technological means that reduce pollution;

(e) promote the collection and sharing among Contracting parties of information on environmentally sound and economically efficient energy policies and cost-effective practices and technologies;

(f) promote public awareness of the environmental impacts of energy systems, of the scope for the prevention or abatement of their adverse environmental impacts, and of the costs associated with various prevention or abatement measures;

¹ Norway scrutiny reserve on deletion of “cost-effective”
(g) promote and cooperate in the research, development and application of energy efficient and environmentally sound technologies, practices and processes which will minimize harmful environmental impacts of all aspects of the energy cycle in an economically efficient manner;

(h) encourage favourable conditions for the transfer and dissemination of such technologies consistent with the adequate and effective protection of intellectual property rights;

(i) promote the transparent assessment at an early state and prior to decision, and subsequent monitoring, of environmental impacts of environmentally significant energy investment projects;

(j) promote international awareness and information exchange on Contracting Parties’ relevant environmental programmes and standards and on the implementation of those programmes and standards;

(k) participate, upon request, and within their available resources, in the development and implementation of appropriate environmental programmes in the Contracting Parties.

Ministerial declaration 11/9 (to Article 22(1)(i))

It is for each Contracting Party to decide the extent to which the assessment and monitoring of Environmental Impacts should be subject to legal requirements, the authorities competent to take decisions in relation to such requirements, and the appropriate procedures to be followed.

ECT 3 [CONF 60] (01/06/93)
Article 22.1 – Environmental Aspects
Ministerial declaration 8 (to Article 22(1)(i))

In pursuit of sustainable development and taking into account its obligations under those international agreements concerning the environment to which it is party, each Contracting Party shall strive to minimise in an economically efficient manner harmful environmental impacts occurring either within or outside its Domain from all operations within the energy cycle in its Area, taking proper account of safety. In doing so each Contracting Party shall act cost-effectively. In its policies and actions each Contracting Party shall strive to take precautionary measures to prevent or minimise environmental degradation. They agree that the polluter in the Areas of Contracting Parties, should, in principle, bear the cost of pollution, including transboundary pollution, with due regard to the public interest and without distorting Investment in the energy cycle or international trade. Contracting Parties shall accordingly:

(a) take account of environmental considerations throughout the formulation and implementation of their energy policies;

(b) promote market-oriented price formation and a fuller reflection of environmental costs and benefits throughout the energy cycle;
(c) having regard to Article 39(4), encourage cooperation in the [DL]\textsuperscript{2} attainment of the environmental objectives of the Charter and cooperation in the field of international environmental standards for the energy cycle, taking into account differences in adverse effects and abatement costs between Contracting Parties;

(d) have particular regard to improving energy efficiency, to developing and using renewable energy sources, to promoting the use of cleaner fuels and to employing technologies and technological means that reduce pollution;

(e) promote the collection and sharing among Contracting parties of information on environmentally sound and economically efficient energy policies and cost-effective practices and technologies;

(f) promote public awareness of the environmental impacts of energy systems, of the scope for the prevention or abatement of their adverse environmental impacts, and of the costs associated with various prevention or abatement measures;

(g) promote and cooperate in the research, development and application of energy efficient and environmentally sound technologies, practices and processes which will minimize harmful environmental impacts of all aspects of the energy cycle in an economically efficient manner;

(h) encourage favourable conditions for the transfer and dissemination of such technologies consistent with the adequate and effective protection of intellectual property rights;

(i) promote the transparent assessment at an early state and prior to decision, and subsequent monitoring, of environmental impacts of environmentallly significant energy investment projects;

(j) promote international awareness and information exchange on Contracting Parties’ relevant environmental programmes and standards and on the implementation of those programmes and standards;

(k) participate, upon request, and within their available resources, in the development and implementation of appropriate environmental programmes in the Contracting Parties.

Ministerial declaration 8 (to Article 22(1)(i))

It is for each Contracting Party to decide the extent to which the assessment and monitoring of Environmental Impacts should be subject to legal requirements, the authorities competent to take decisions in relation to such requirements, and the appropriate procedures to be followed.

\[2\text{ Norway scrutiny reserve on deletion of “cost-effective”}\]
In pursuit of sustainable development and taking into account its obligations under those international environmental agreements to which it is a party, each Contracting Party shall strive to minimise in an economically efficient manner harmful environmental impacts occurring both within and outside its Domain from all operations within the energy cycle in its Domain, taking proper account of safety, in doing so each Contracting Party shall act cost-effectively. In its policies and actions each Contracting Party shall strive to take precautionary measures to anticipate, prevent or minimise environmental degradation. They agree that the polluter in the Domains of Contracting Parties, should, in principle, bear the cost of pollution, including transboundary pollution with due regard to the public, interest and without distorting Investment in the energy cycle or international trade. Contracting Parties shall accordingly:

(a) take account of environmental considerations throughout the formulation and implementation of their energy policies;

(b) promote market-oriented price formation throughout the energy cycle and a fuller reflection of environmental costs and benefits;

(c) [having regard to Article 39(4) encourage cooperation in the cost - effective attainment of the environmental objectives of the Charter and in the field of international environmental standards for the energy cycle, taking into account differences between Contracting Parties in adverse effects and abatement costs;]³

(d) have particular regard to improving energy efficiency, to developing and using renewable energy sources, to promoting the use of cleaner fuels and to employing technologies and technological means that reduce pollution;

(e) promote the collection and sharing amongst Contracting Parties of information on environmentally sound and economically efficient energy policies and cost-effective practices and technologies;

(f) promote public awareness of the environmental impacts of energy systems, of the scope for the prevention or abatement of their adverse impacts, and of the costs associated with various prevention or abatement measures;

(g) promote and cooperate in the research, development and application of energy efficient and environmentally sound technologies, practices and processes which will minimise harmful environmental impacts of all aspects of the energy cycle in an economically efficient manner;

(h) encourage favourable conditions for the transfer and dissemination of such technologies consistent with the adequate and effective protection of intellectual property rights;

³ USA scrutiny reserve
(i) promote the transparent assessment at an early stage and prior to decision, and subsequent monitoring, of environmental impacts of environmentally significant energy investment projects;

(j) promote internationally awareness and information exchange on Contracting Parties relevant environmental programmes and standards and on the implementation of those programmes and standards;

(k) participate, upon request, and within their available resources, in the development and implementation of appropriate environmental programmes in the Contracting Parties.

Ministerial declaration 7 (to Article 22(1)(i))

It is for each Contracting Party to decide the extent to which the assessment and monitoring of Environmental Impacts should be subject to legal requirements, the authorities competent to take decisions in relation to such requirements, and the appropriate procedures to be followed.

(Compromise text) ECT 1 [CONF 50] (15/03/93) Article 22.1 – Environmental Aspects

In pursuit of sustainable development and consistently with those international environmental agreements to which they are parties, each Contracting Party shall strive to minimise in an economically efficient manner adverse effects on the environment occurring both within and outside its Domain from all operations within the energy cycle in its Domain, taking proper account of safety. In doing so each Contracting Party shall act cost effectively. In its policies and actions each Contracting Party shall strive to take precautionary measures to anticipate, prevent or minimize environmental degradation. They agree that the polluter [DL] should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting Investment in the energy cycle or international trade. Contracting Parties shall accordingly:

(a) take account of environmental considerations throughout the formulation and implementation of their energy policies;

(b) promote market-oriented price formation throughout the energy cycle and a fuller reflection of environmental costs and benefits;

(c) encourage cooperation in the cost-effective attainment of the environmental objectives of the Charter for the energy cycle, taking account of the different circumstances of Contracting Parties;

(d) have particular regard to improving energy efficiency, to developing and using renewable energy sources, to promoting the use of cleaner fuels and to employing technologies that reduce pollution;

(e) promote the collection and sharing amongst Contracting Parties of information on environmentally sound and economically efficient energy policies and cost effective practices and technologies;
(f) promote public awareness of the environmental impacts of energy systems, of the scope for the prevention or abatement of their adverse impacts, and of the costs associated with various prevention or abatement measures;

(g) promote and cooperate in the research, development and application of energy efficient and environmentally sound technologies, practices and processes which will minimize harmful environmental impacts of all aspects of the energy cycle cost effectively;

(h) encourage favourable conditions for the transfer and dissemination of such technologies consistent with the adequate and effective protection of intellectual property rights;

(i) promote the transparent assessment at an early stage and prior to decision, and subsequent monitoring, of environmental impacts of environmentally significant energy investment projects;

(j) promote internationally awareness and information exchange on Contracting Parties relevant environmental programmes and standards and on the implementation of those programmes and standards.

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**BA-37 (01/03/93)**

Article 14.1 – Environmental Aspects

In pursuit of sustainable development [and consistently with those international environmental agreements to which they are parties]⁴, each Contracting Party shall [strive]⁵ to minimise in an economically efficient manner adverse effects on the environment occurring both within and outside its Domain from all operations within the energy cycle in its Domain, taking proper account of safety. In doing so each Contracting Party shall act cost effectively. In its policies and actions each Contracting Party shall [strive to take]⁶ precautionary measures to anticipate, prevent or minimise environmental degradation. They [agree]⁷ that the polluter [in their Domains]⁸ should, in principle, bear the cost of pollution, with due regard to the public interest and without⁹ distorting investment in the energy cycle or international trade. Contracting Parties shall accordingly:

(a) take account of environmental considerations throughout the formulation and implementation of their energy policies;

(b) promote market-oriented price formation throughout the energy cycle and [a fuller reflection of environmental costs and benefits]¹⁰;

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⁴ USA and Japan reserve and suggest that this concept could be dealt with in the Preamble.
⁵ Kazakhstan asks for replacing with “undertake”.
⁶ Scrutiny reserve by several delegations. USA regards this wording essential
⁷ Japan and USA reserve relating to the justiciability of this Article. Legal Sub-Group will consider if earlier advice on this subject (BA-19) is still applicable to the revised text of Article 14.
⁸ General reserve. EC and USA to discuss possible clarification.
⁹ Austria suggests insertion of “unduly. Legal Sub-Group will be consulted on principle of referring to trade and investment in this paragraph.
¹⁰ USA scrutiny reserve
(c) [encourage cooperation in the attainment of the environmental objectives of the Charter for the energy cycle\textsuperscript{11,12}]

(d) have particular regard to improving energy efficiency, to developing and using renewable energy sources, to promoting the use of cleaner fuels and to employing technologies\textsuperscript{13} that reduce pollution;

(e) promote the collection and sharing amongst Contracting Parties of information on environmentally sound and economically efficient energy policies and cost effective practices and technologies;

(f) promote public awareness of the environmental impacts of energy systems, of the scope for the prevention or abatement of their adverse impacts, and of the costs associated with various prevention or abatement measures;

(g) promote and cooperate in the research, development and application of energy efficient and environmentally sound technologies, practices and processes which will minimize harmful environmental impacts of all aspects of the energy cycle cost effectively;

(h) encourage favourable conditions for the transfer and dissemination of such technologies consistent with the adequate and effective protection of intellectual property rights;

(i) promote the transparent assessment at an early stage and prior to decision, and subsequent monitoring, of environmental impacts of environmentally significant energy investment projects\textsuperscript{14};

(j) promote internationally awareness and Information exchange on Contracting Parties' relevant environmental programmes and standards and on the implementation of those programmes and standards.

\textsuperscript{11} Norway proposal for additional wording: “… in a cost-effective way, taking into account differences in adverse effects and abatement costs, and by coordination of measures as appropriate”. Sweden supports Norway, with omission of “and abatement costs”. Poland could accept alternative of adding “… taking into account the different circumstances of Contracting Parties”.

\textsuperscript{12} Kazakhstan wants to substitute this subparagraph with the following text: “encourage cooperation aimed at limiting adverse effects while maximising general social benefits and by using coordination measures on a case-by-case basis”.

\textsuperscript{13} Kazakhstan suggests insertion of “and technological means”

\textsuperscript{14} Japan supported by the USA suggest addition of: “which are subject to a decision of a competent authority in accordance with an applicable national procedure;”

\textsuperscript{15} Kazakhstan suggests adding two new subparagraphs reading:

( ) Cooperate in the development and application of common ecological standards for energy projects before the beginning of the economic activity;

( ) participate in the development and realisation of appropriate ecological programmes in the Contracting Parties.”
[In pursuit of sustainable development [and consistently with those International environmental agreements to which they are parties]\(^\text{16}\), each Contracting Party shall strive [to minimise]\(^\text{17}\). In an economically efficient manner adverse effects on the environment occurring both within and outside its Domain from all operations within Its Domain and within the energy cycle taking proper account of safety. In doing so each Contracting Party shall act cost effectively . In its policies and actions each Contracting Party shall [be guided by [, inter alia,]\(^\text{18}\) the principles]\(^\text{19}\) that they should take [, according to their capacities,]\(^\text{20}\) precautionary measures to anticipate, prevent or minimise environmental degradation and that the polluter should, in principle bear the cost of pollution, with due regard to the public interest and without\(^\text{21}\) distorting Investment in the energy cycle or international trade. Contracting Parties shall accordingly:]\(^\text{22}\)

(a) take account of environmental considerations throughout the formulation and implementation of their energy policies;

(b) promote market[-oriented]\(^\text{23}\) price-formation throughout the energy cycle and [a fuller reflection therein of environmental costs and benefits and promote]\(^\text{23}\) research in appropriate fora on methods to quantify and appropriately recognize such environmental costs and benefits;\(^\text{24}\)

(c) encourage cooperation in the attainment of the environmental objectives [of minimising]\(^\text{17}\) in an economically efficient manner adverse environmental effects in a cost-effective way by taking into account the differences among Contracting Parties\(^\text{25}\) in abatement costs of any given reduction of such adverse [effects]\(^\text{26}\) [and by coordination measures as appropriate]\(^\text{27}\);

(d) have particular regard to improving energy efficiency, to developing and using renewable energy sources, to promoting the use of cleaner fuels and to employing technologies that reduce pollution;

(e) promote the dissemination of information on environmentally sound and economically efficient energy policies and cost effective practices and technologies, in order to increase

\(^\text{16}\) USA reserve

\(^\text{17}\) USA reserve. USA prefers replacing with “to limit”.

\(^\text{18}\) Norway and Austria scrutiny reserve. Austria prefers substituting with “in particular”.

\(^\text{19}\) USA and Japan reserve.

\(^\text{20}\) Austria, Norway, Hungary and Canada shall seek the deletion.

\(^\text{21}\) Austria suggests insertion of “unduly” for achieving better balance between Trade and Investment Articles and the Article on Environment.

\(^\text{22}\) General scrutiny reserve, except European Communities, on the chapeau.

\(^\text{23}\) USA reserve. (USA suggests deletion.)

\(^\text{24}\) USA suggests with respect to second footnote 14.8 in this subparagraph adding: “and encourage implementation of methods which each Contracting Party finds appropriate in internalisation”.

\(^\text{25}\) Norway supported by Switzerland and Sweden suggests inclusion: “in costs environmental degradation and”

\(^\text{26}\) Legal Drafting Sub-Group will examine whether to use the word “effects” or “environmental impacts”

\(^\text{27}\) USA and Australia reserve
public awareness of the environmental considerations, ways in which adverse environmental effects arising from the energy cycle can be abated, and the costs associated with various abatement measures. They shall share their experience on how to promote such awareness most effectively. [In particular where such promotion includes, inter alia, labelling and similar schemes for informing the public about comparative energy efficiencies of energy consuming products available on the market, they shall seek to avoid related barriers to trade];

(f) promote and cooperate in the research, development, application and diffusion, including transfer, of [energy efficient and environmentally sound] technologies, practices and processes to attain [environmental goals] cost effectively, consistent with the need for adequate and effective protection of Intellectual Property;

(g) promote the transparent assessment [at an early stage and prior to decision] of environmental impacts of environmentally significant energy Investment projects [and subsequent monitoring of such impacts]

(h) promote internationally awareness and information exchange on Contracting Parties' relevant environmental programmes and standards and on the implementation of those programmes and standards.

[In pursuit of sustainable development [and consistently with those international environmental agreements to which they are parties], each Contracting Party shall strive [to minimise] adverse effects on the environment occurring both within and outside Its Domain from all operations within its Domain and within the energy cycle in an economically sound manner taking proper account of safety. In doing so each Contracting Party shall [in its policies and actions be guided by []], that they should take [according to their capabilities,] cost-effective precautionary measures to anticipate, prevent or minimise environmental degradation and that the polluter should, in principle bear the cost of pollution, with due regard to the public interest and without distorting Investment in the energy cycle or international trade. Contracting Parties shall accordingly:]

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28 Norway, Japan and USA scrutiny reserve.
29 USA wants to have inserted: “commercial”.
30 EC and Hungary wish to consider inserting “best practicable” (Hungary) or “best available” (European Communities) before the word “energy”.
31 Japan and Austria reserve pending the resolution of their concern as in subparagraph (c)
32 Japan reserve. (Japan asks for deletion)
33 USA suggests adding: “which are subject to a decision of a competent authority in accordance with an applicable national procedure.”
34 USA substantial reserve. Scrutiny reserve by all other delegations.
35 Norway scrutiny reserve
36 To meet USA concerns Chairman suggests that delegations consider the substitution with : “observe the guidelines”
37 Austria, Norway, Hungary and Canada shall seek the deletion.
38 General scrutiny reserve on the chapeau
(a) take account of environmental considerations throughout the formulation and implementation of their energy policies;

(b) promote market-oriented price-formation throughout the energy cycle and [a fuller reflection therein of environmental costs and benefits and promote] research in appropriate fora on methods to quantify and appropriately recognize such environmental costs and benefits;

(c) encourage cooperation [to reduce] adverse [effects] in the most cost-effective way [and maximize overall social benefits] [and by coordination measures as appropriate] taking into account the differences among Contracting Parties in abatement costs of any given reduction of such effects;

(d) promote in their national energy policies action [to minimise] in an economically acceptable way adverse environmental effects having particular regard to the improvement of energy efficiency and to the economic development and use of renewable energy sources and promoting the use of cleaner fuels and employing technologies that reduce pollution;

(e) promote the dissemination of information on environmentally sound and economically efficient energy policies, practices and technologies in order to increase public awareness of the environmental considerations, ways in which adverse environmental effects arising from the energy cycle can be abated, and the costs associated with various abatement measures. They shall share their experience on how to promote such awareness most effectively. [In particular where such promotion includes, inter alia, labelling and similar schemes for informing the public about comparative energy efficiencies of energy consuming products available on the market, they shall seek to avoid related barriers to trade];

(f) promote and cooperate in the research, development, application and diffusion, including transfer, of energy efficient and environmentally sound technologies, practices and processes which [reduce] adverse environmental effects cost effectively, consistent with the need for adequate and effective protection of Intellectual Property;

(g) promote the transparent assessment [at an early stage and prior to decision] of environmental impacts of environmentally significant energy Investment projects [and subsequential monitoring of such impacts];

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39 USA suggests with respect to second footnote 14.8 in this subparagraph adding: “and encourage implementation of methods which each Contracting Party finds appropriate in internalisation”

40 USA, EC and Austria scrutiny reserve. (USA suggests replacing with “to limit”, EC and Austria with “to minimise”)

41 Legal Drafting Sub-Group will examine whether to use the word “effects” or “environmental impacts”

42 EC scrutiny reserve subject to examination by Sub-Group on Article 14

43 USA and Australia reserve

44 USA suggests insertion of: “the overall maximalization of net benefits and recognising”
(h) promote internationally awareness and information exchange on Contracting Parties' relevant environmental programmes and standards and on the implementation of those programmes and standards.

BA-15 (12/08/92)
Article 14.1 and 2 – Environmental Aspects

(1) The Contracting Parties shall strive to minimise harmful effects on the environment of all aspects of the energy cycle in an economically and environmentally sustainable manner. In doing so they shall be guided by the principles that precautionary action should be taken to anticipate, prevent or minimise environmental damage and that the polluter should in principle bear the cost of such damage. Contracting Parties shall accordingly:

(a) take account of environmental considerations throughout the formulation and implementation of their energy policies, including an appropriate mix of policy instruments;

(b) promote market-oriented price-formation including a fuller reflection of environmental cost and benefits; that occur both within and outside their Domains and promote research in appropriate fora on methods to quantify and appropriately recognize environmental costs and benefits.

(c) through cooperation as appropriate, take into account the differences in environmental impacts and abatement costs between Contracting Parties to minimise harmful effects in the most cost-effective way.

(d) promote and implement national energy policies that minimizes in an economically acceptable way any negative environmental effects having particular regard to the improvement of energy efficiency and the development and use, of renewable sources;

(e) promote the dissemination of information on environmentally sound and economically efficient energy policies, practices and technologies in order to increase awareness among consumers of the environmental considerations and ways to reduce adverse effects and consult each-other on how to promote such awareness most effectively. Such promotion may include labelling schemes for informing the public about comparative environmental effects of energy consuming products available on the market;

(f) encourage favourable conditions for the transfer and dissemination of technology which will reduce harmful environmental effects, taking account of the need for adequate protection of Intellectual Property;

(g) promote the use of best available technologies not entailing excessive costs for energy efficiency and environmental protection;

(h) promote the transparent assessment of environmental impacts of environmentally significant Investment projects at an early stage and ensure transparency within their legal and administrative framework;
(i) encourage appropriate research and development activities to foster innovation in environmentally sound and economically efficient energy technologies including sources of renewable energy;

(j) promote internationally awareness and information exchange on Contracting Parties' relevant environmental programmes and standards and on the implementation of these programmes and standards.

(2) The Contracting Parties shall ensure consistency between their energy policies and international environmental agreements to which they are parties.

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(1) The Contracting Parties shall strive to minimise harmful effects on the environment of all aspects of the Energy Cycle in an economically and environmentally sound manner in order to move towards sustainable development. To this end they shall:

(a) take account of environmental concerns throughout the formulation and implementation of their energy policies, including an appropriate mix of policy instruments;

(b) promote market-oriented price-formation including a further reflection of environmental cost and benefits;

(c) promote an energy mix that minimises in an economically acceptable way the negative Environmental Impacts of the Energy Cycle having particular regard to the encouragement of renewable sources;

(d) promote the dissemination of information on environmentally sound energy policies, practices and technologies to promote public awareness among consumers on Environmental Impacts of their behaviour in relation to energy use and consult with each other on how to promote such awareness most effectively. Such promotion may include labelling schemes for informing the public about comparative environmental effects of energy consuming products available on the market;

(e) encourage favourable conditions for the transfer and dissemination of technology which will reduce harmful Environmental Impacts of all aspects of the Energy Cycle;

(f) promote the use of best available energy technologies not entailing excessive costs;
(g) promote the transparent assessment of Environmental Impacts of Energy investments projects at an early stage and ensure transparency in their legal and administrative requirements;

(h) implement appropriate research and development activities including with respect to renewable sources and the internalisation of environmental cost in the energy prices;

(i) promote internationally awareness and Information exchange on Contracting Parties' environmental programmes and standards that relate to the energy sector and on the implementation of these programmes and standards.

(2) Actions of the Contracting Parties relating to the environment shall be based on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that the polluter should pay.

(3) The Contracting Parties shall ensure consistency between their energy policies and international environmental agreements to which they are parties.

### BA-12 (09/04/92)

**Article 14 – Environmental Aspects**

(1) The Contracting Parties shall strive to minimize harmful effects on the environment of all aspects of the Energy Cycle in an economically and environmentally sound manner in order to move towards sustainable development. To this end they shall:

(a) take account of environmental concerns throughout the formulation and implementation of their energy policies, including an appropriate mix of policy instruments;

(b) promote market-oriented price-formation including a fuller reflection of environmental cost and benefits;

(c) promote an energy mix that minimises in an economically acceptable way the negative Environmental Impacts of the Energy Cycle having particular regard to the encouragement of renewable sources:

(d) promote the dissemination of information on environmentally sound energy policies, practices and technologies to promote public awareness among consumers on Environmental Impacts of their behaviour in relation to energy use and consult with each-other on how to promote such awareness most effectively. Such promotion may include labelling schemes for informing the public about comparative environmental effects of energy consuming products available on the market;
(e) encourage favourable conditions for the transfer and dissemination of technology which will reduce harmful Environmental Impacts of all aspects of the Energy Cycle;

(f) promote the use of best available energy technologies not entailing excessive costs;

(g) promote the transparent assessment of Environmental Impacts of energy Investments projects at an early stage and ensure transparency in their legal and administrative requirements;

(h) implement appropriate research and development activities including with respect to renewable sources and the internalisation of environmental cost in the energy prices;

(i) promote internationally awareness and information exchange on Contracting Parties' environmental programmes and standards that relate to the energy sector and on the implementation of these programmes and standards.

(2) Actions of the Contracting Parties relating to the environment shall be based on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that the polluter should pay.

(3) The Contracting Parties shall ensure consistency between their energy policies and international environmental agreements to which they are parties.

**Article 14 – Environmental Aspects**

(1) The Contracting Parties shall strive to minimise harmful effects on the environment of energy production, transportation, transport and use in an economically and environmentally sustainable manner. To this end they shall:

(a) ensure consistency between their energy policies and international environmental agreements to which they are parties;

(b) take account of impacts on the environment in the formulation and implementation of their energy policies;
(c) promote awareness among citizens of the effects on the environment of their behaviour in relation to energy consumption and their choice of fuels, consult each other on how most effectively to promote such awareness and seek to harmonise labelling schemes for informing the public about the comparative environmental benefits of consumer appliances;

(d) encourage markets which facilitate the internalisation in the prices of different forms of energy of environmental costs and benefits;

(e) promote in energy Industries the use of best available technologies not entailing excessive costs;

(f) encourage favourable conditions for the transfer of technology which will reduce harmful environmental impacts from the production, transformation, transport and use of energy;

(g) co-ordinate their legal and administrative requirements for assessing the environmental impact of new energy installations.

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**BA 4 (31/10/91)**

*Article 6 - Energy Policies*

Each Contracting Party recognises that its governmental policies concerning matters which are the subject of this Agreement are linked to the energy policies of other Contracting Parties. In carrying out their energy policies, Contracting Parties shall strive to liberalise and improve access to markets, to improve [security of supply and to reduce damage to the environment].

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**BP 2 (11/09/91)**

*Article 6 - Energy Policies*

Each Contracting Party recognises that its governmental policies concerning matters which are the subject of this Agreement are linked to the energy policies of other Contracting Parties. In carrying out their energy policies, Contracting Parties shall take account of the need to liberalise markets, improve security of supply and enhance the environment. The Governing Council referred to in Article 28 below shall meet at such regular intervals as it may specify to review the energy policies of the Contracting Parties and to discuss matters of mutual interest relating to such policies.

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45 Australia: is concerned that the formulation “Improve security of supply” is ambiguous and could be used to justify restrictive trade policies designed to ensure security of domestic energy supply. If this concept is retained, suggests referring to “security of supply in an environmentally consistent manner”.

* Ed. note: Italics added to emphasise the part relevant to current Article 19.1
Article 19.2

At the request of one or more Contracting Parties, disputes concerning the application or interpretation of provisions of this Article shall, to the extent that arrangements for the consideration of such disputes do not exist in other appropriate international fora, be reviewed by the Charter Conference aiming at a solution.

[At the request of one or more Contracting Parties, disputes concerning the application or interpretation of provisions of this Article shall, to the extent that arrangements for the consideration of such disputes do not exist in other appropriate international fora, be reviewed by the Charter Conference aiming at a solution.]\(^\text{46}\)

\(^{46}\) Norway maintains its proposal as contained in the Plenary Room Document 7 of 26 April 1993.
Article 19.3

ECT as adopted (17/12/94)
CONF 104 (Text for adoption) (14/09/94)

Article 19.3 – Environmental Aspects

For the purposes of this Article:

(a) “Energy Cycle” means the entire energy chain, including activities related to prospecting for, exploration, production, conversion, storage, transport, distribution and consumption of the various forms of energy, and the treatment and disposal of wastes, as well as the decommissioning, cessation or closure of these activities, minimizing harmful Environmental Impacts;

(b) “Environmental Impact” means any effect caused by a given activity on the environment, including human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interactions among these factors; it also includes effects on cultural heritage or socio-economic conditions resulting from alterations to those factors;

(c) “Improving Energy Efficiency” means acting to maintain the same unit of output (of a good or service) without reducing the quality or performance of the output, while reducing the amount of energy required to produce that output;

(d) “Cost-Effective” means to achieve a defined objective at the lowest cost or to achieve the greatest benefit at a given cost.

Interim text (25/06/94)
Article 22.3 – Environmental Aspects

For the purposes of this Article:

(a) “Energy Cycle” means the entire energy chain, including activities related to prospecting for, exploration, production, conversion, storage, transport, distribution and consumption of the various forms of energy, and the treatment and disposal of wastes, as well as the decommissioning, cessation or closure of these activities, minimizing harmful Environmental Impacts;

(b) “Environmental Impact” means any effect caused by a given activity on the environment, including human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interactions among these factors; it also includes effects on cultural heritage or socio-economic conditions resulting from alterations to those factors;

(c) “Improving Energy Efficiency” means acting to maintain the same unit of output (of a good or service) without reducing the quality or performance of the output, while reducing the amount of energy required to produce that output;
(d) “Cost-Effective” means to achieve a defined objective at the lowest cost or to achieve the greatest benefit at a given cost.

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<td>ECT 3 [CONF 60] (01/06/93)</td>
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<td>ECT 2 [CONF 56] (01/05/93)</td>
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For the purposes of this Article:

(a) “energy cycle” means the entire energy chain, including activities related to prospecting for, exploration, production, conversion, storage, transport, distribution and consumption of the various forms of energy, and the treatment and disposal of wastes, as well as the decommissioning, cessation or closure of these activities, minimizing harmful environmental impacts.

(b) “environmental impact” means any effect caused by a given activity on the environment, including human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interactions among these factors; it also includes effects on cultural heritage or socio-economic conditions resulting from alterations to those factors.

(c) “improving energy efficiency” means acting to maintain the same unit of output (of a good or service) without reducing the quality or performance of the output, while reducing the amount of energy required to produce that output.

(d) “cost-effective” means to achieve a defined objective at the lowest cost or to achieve the greatest benefit at a given cost.

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<td>Article 22.2 – Environmental Aspects</td>
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For the purposes of this Article:

a) “energy cycle” means the entire energy-chain including prospecting for, exploration, production, conversion, storage, transport, distribution and consumption of the various forms of energy, the decommissioning and treatment of energy-related physical structures and activities related to disposal of waste.
b) “environmental impacts” means any effect caused by a given activity on the environment, including human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interactions among these factors; it also includes effects on cultural heritage or socio-economic conditions resulting from alterations to those factors.

c) “improving energy efficiency” means acting to maintain the same unit of output (of a good or service) without reducing the quality or performance of the output, whilst reducing the amount of energy required to produce that output.

[For the purposes of this Article:

i) “energy cycle” means the entire energy-chain including prospecting for, exploration, production, conversion, storage, transport, distribution and consumption of the various forms of energy, the decommissioning and treatment of energy-related physical structures and [activities related to disposal of waste]47.

ii) “environmental impacts” means any effect caused by a given activity on the environment, including human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interactions among these factors; it also includes effects on cultural heritage or socio-economic conditions resulting from alterations to those factors.48

iii) “improving energy efficiency” means acting to maintain the same unit of output (of a good or service) without reducing the quality or performance of the output, whilst reducing the amount of energy required to produce that output.]49

[(2) For the purposes of this Article:

47 Turkey suggests replacing with: “waste management”. Subject to consideration in the Legal Sub-Group.
48 Romania asks for incorporation of concept of transboundary pollution and environmental accidents into this definition. WG II believes this is covered by the chapeau.
49 Australia suggests moving definitions to Article 1. Legal Sub-Group will consider this possibility as well as consistency of Article 14 definitions with those already in Article 1.
50 Austria suggests inclusion of definition “cost-effective measures” indicating that general understanding is that they are measures with effects on cost and not on the environment.
i) “energy cycle” means the entire energy-chain including prospecting for, exploration, production, conversion, storage, transport, distribution and consumption of the various forms of energy, the decommissioning and treatment of energy-related physical structures and [activities related to disposal of waste].

ii) “environmental impacts” means any effect caused by a proposed activity on the environment, including human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interactions among these factors; it also includes effects on cultural heritage or socio-economic conditions resulting from alterations to those factors.

iii) “improving energy efficiency” means acting to maintain the same unit of output (of a good or service) without reducing the quality or performance of the output, whilst reducing the amount of energy required to produce that output.

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**BA-22 (21/10/92)**

Article 14.2 – Environmental Aspects

[ For the purposes of this Article:]

i) “energy cycle” means the entire energy-chain including prospecting for, exploration, production, conversion, storage, transport, distribution and consumption of the various forms of energy, the decommissioning and treatment of energy-related physical structures and [activities related to disposal of waste].

ii) “environmental impacts” means any significant effects on the environment, including human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interactions among these factors.

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**BA-15 (12/08/92)**

Article 14.3 – Environmental Aspects

For the purposes of this Article:

i) “energy cycle” means the entire energy-chain including prospecting for, exploration, production, conversion, storage, transport, waste disposal and distribution and consumption of the various forms of energy and the decommissioning and treatment of energy-related physical structures.

ii) “environmental impacts” means any significant effects on the environment, including human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interactions among these factors.

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51 USA scrutiny reserve
52 Austria suggests deletion, since activity which is only proposed cannot have environmental impacts.