

ANNEX 3 WORKING PARTY ON RENEWABLE ENERGY TECHNOLOGIES

**MANDATE OF THE IEA WORKING PARTY ON
RENEWABLE ENERGY TECHNOLOGIES**

1. Objective

The Working Party on Renewable Energy (REWP) shall provide advice to the IEA Committee on Energy Research and Technology (CERT) and other IEA bodies on: renewable energy sources and technologies, related policies, trends, projects, programmes and strategies which address priority energy security, diversity and environmental interests of member countries, and activities to meet those needs through international co-operation and collaboration facilitated by the IEA process.

2. Functions

Having regard to the *Shared Goals*, adopted by IEA Ministers at their 4 June 1993 meeting in Paris, and to the *co-operation in long-term research, demonstration and deployment of renewable energy technologies*, and to the *encouragement to expand clean energy markets, including renewables*, adopted by IEA ministers at their 25 May 1999 meeting in Paris, the Working Party shall:

- Provide advice and suggestions on the promotion of collaborative R&D and demonstration, removal of institutional barriers, policies and other means of accelerating market deployment, and identification and mitigation of environmental impacts.
- Continue strong oversight of and support for the REWP Implementing Agreements to help ensure the effectiveness of their programmes for developing and deploying renewable energy technologies.
- Continue and strengthen its role as a primary source of information and analysis on renewable energy technologies for IEA committees and offices, and non-IEA stakeholders.
- Liaison with selected non-member countries, and other institutions and entities whose functions address the area of renewable energy technology, with a view to promote and structure international collaboration.

3. Membership, Structure and Procedures

All IEA member governments and the European Commission are members of the REWP. Members shall be represented by delegates whose responsibilities are related to all or most of the renewable sources of energy including solar, wind, hydropower, biomass, geothermal, ocean, and hydrogen.

Each national representative shall report regularly on ongoing activities in his/her country; shall act as a conduit of information from and to the Secretariat; shall provide contacts within the national region in relation to specific requests for participation or support of activities by the Working Party or Secretariat, and shall review and assess studies and reports as requested by the Working Party. Other national or international entities may be consulted as appropriate.

- The Working Party is given a renewable mandate of three years by the CERT. The revision and renewal of the mandate will be undertaken at the CERT meeting prior to expiration of each three-year term. The Working Party will elaborate a Strategic Plan to be updated every three years and to be presented for acknowledgement and approval by the CERT.

- The REWP elects a Chairman and one or more Vice-Chairmen for a three-year period to lead its efforts. The Chair and Vice-Chairs meet between full REWP meetings in cabinet to provide continuity and direction to the REWP's ongoing activities.
- The REWP is supported by the Renewable Energy Unit of the IEA Secretariat. The REU proposes activities to support the REWP's Strategy, and works according to an Operational Plan that is reviewed and approved by the REWP.

The REWP shall carry out its functions without the disclosure of confidential or proprietary information of any entity.

WORKING PARTY ON RENEWABLE ENERGY TECHNOLOGIES

STRATEGIC PLAN 2004-2006

I. Background and Situation Analysis

A. The Working Party

The International Energy Agency's (IEA's) Working Party on Renewable Energy Technologies, often referred to as the Renewable Energy Working Party (REWP), has served since April 1982, as the principal advisory body to the IEA's Committee on Energy Research and Technology (CERT) on all matters relating to renewable energy. It also serves as a reference body for renewable energy issues within the IEA, represents the IEA to outside parties on these issues, and oversees the research, development and demonstration (RD&D) efforts of eight renewable energy Implementing Agreements, and one addressing hydrogen.

B. Definitions

Renewable energy is energy that is derived from natural processes that are replenished constantly. In its various forms, it derives directly or indirectly from the sun, or from heat generated deep within the earth. Included in the definition is energy generated from solar, wind, biomass, geothermal, hydropower, ocean resources, and biofuels, and electricity and hydrogen derived from those renewable resources.

C. Situation

Collectively, non-hydropower renewable energy, in its various forms, is the fastest growing energy source in the world. One form of renewable energy, hydropower, is a mature technology, is growing at a moderate rate, and today accounts for approximately 20% of the world's supply of electricity. Starting from a very small base, it is the other emerging forms of renewable energy that are growing rapidly. This growth reflects several factors: the steady improvement in technological performance and reduction in associated costs, increasing concern about the local and global environmental impacts of power generation by traditional means, and the growing realisation that today's global energy system, based primarily on use of depleting fossil energy, is not sustainable, and cannot be projected into the long-term future. This leads to the conclusion that the world is currently in the early stages of a necessary inevitable transition to a sustainable energy system that will be largely dependent on other forms of energy, including renewable resources.

Many recent statements and actions support this conclusion:

"We particularly commit ourselves to enhance the role of renewables and other lower carbon-emitting sources of energy in the energy mix, and work to shape a future where basic energy services will be available to an increasing number of the world's citizens." IEA Energy Ministers in May 2003.

"We recognise the need ... to support the development of cleaner, sustainable and more efficient technologies. ... In undertaking these activities, we are committed to working co-operatively with other developed countries. We are conscious that, to meet the objectives of the WSSD, developing countries and countries with economies in transition need to build and strengthen their capacity to assimilate and generate knowledge for sustainable development. We reaffirm our commitment made at the WSSD to assist them through international co-operation in enhancing their research capacities." G8 Heads of State in June 2003.

The Plan of Implementation adopted at the WSSD in September 2002, called on the countries "... to substantially increase the global share of renewable energy sources ...".

Most observers would agree that renewable energy development has reached a critical point: while technologies will continue to improve, most are ready for aggressive market deployment. It is growing

attention to market acceleration activities, together with continued support for R&D, that is needed to bring the many benefits of renewable energy to the peoples of the world.

II. Mission and Vision of the REWP

A. Mission

To help achieve steady and significant increases in renewable energy's technological performance and market share by:

- Supporting and adding value to its Implementing Agreements.
- Collaborating with other public, private, and multilateral organisations.
- Helping to educate the various publics on the status and value of renewable energy and the conditions necessary for its market success.
- Supporting the leadership efforts of the IEA, its Committees and Working Parties.

B. Vision

Through the next several decades, renewable energy technologies, due to their continually improving performance and cost, and growing recognition of their environmental, economic and social benefits, will grow increasingly competitive with traditional energy technologies, so that by the middle of the 21st century, renewable energy, in its various forms, should be supplying half of the world's energy needs.

III. Objectives and Strategies

To carry out its mission, the REWP has identified four principal objectives and several associated strategies:

Objective 1: Continue and strengthen its role as a primary source of analysis and information on renewable energy technologies for IEA committees and offices, and non-IEA stakeholders.

- Strategy 1(a): Contribute to international collaboration in the development and market deployment of renewable energy technologies that are expected to respond most effectively in the short and longer term to energy security concerns, environmental and economic goals of member countries.
- Strategy 1(b): Identify and characterise R&D priorities for renewable energy technologies, and the innovations that will lead to new and growing markets.
- Strategy 1(c): Strengthen the Renewable Energy Unit's capacity for analysis through staff enhancement and support.
- Strategy 1(d): Utilise publications, conferences, seminars, workshops, media and other outreach mechanisms to communicate the values of renewable energy technologies to the public and other stakeholders.

Objective 2: Continue strong oversight of and support for the REWP Implementing Agreements to help ensure the effectiveness of their programmes for developing and deploying renewable energy technologies.

- Strategy 2(a): Interact with the Executive Committees of Implementing Agreements, receiving suggestions on how to improve the programme efficiency, sharing identified opportunities for strategically synergetic action, and providing advice when needed.
- Strategy 2(b): Periodically review and assess the effectiveness of Implementing Agreements and other international collaborative activities with a view to identifying gaps and overlaps in

existing coverage, renewing existing programmes and stimulating new collaborative activities, discontinuing or expanding activities, and encouraging closer collaboration with industry.

- Strategy 2(c): Enhance communication among the various Implementing Agreements, and with the REWP, through regular joint meetings.
- Strategy 2(d): Encourage and facilitate enhanced interaction of the REWP and its Implementing Agreements with private sector and non-member country representatives, as a means of strengthening R&D and market acceleration efforts.

Objective 3: Identify and describe the broad range of policies and financial and other market-related factors that affect market deployment of renewable energy technologies.

- Strategy 3(a): Assess the impacts of utility restructuring on the market environment for renewable energy technologies.
- Strategy 3(b): Assess the implications for renewable energy technologies of the trend toward use of embedded, distributed generation and energy storage systems.
- Strategy 3(c): Evaluate the potential market impacts of customer preferences for renewable energy technologies and available mechanisms to facilitate exercise of customer choice.
- Strategy 3(d): Appraise the strategies and measures that can be adopted by member and non-member country governments to support renewable energy markets.
- Strategy 3(e): Calculate the needed investments to reduce the cost of energy from renewable energy technologies, and develop strategies to mobilise that investment.
- Strategy 3(f): Evaluate the impacts and implications of widespread market success of renewable energy technologies.

Objective 4: Develop and help implement recommendations for accelerated market deployment of renewable energy technologies, both in developed and developing countries.

- Strategy 4(a): Establish strategic partnerships with private sector business and financial organisations to incorporate their perspectives in the REWP's strategy for accelerated market deployment, and to enhance their confidence in the potential of renewable energy technologies.
- Strategy 4(b): Establish strategic partnerships with multilateral organisations to ensure co-ordination in efforts to accelerate renewable energy market deployment, especially in non-member countries.
- Strategy 4(c): Engage IEA member and non-member country governments so as to enhance their understanding of the status and benefits of renewable energy technologies, and provide assistance in strengthening renewable energy markets.
- Strategy 4(d): Continue and expand efforts to advise and support the OECD Energy Ministers, the IEA Governing Board, and IEA committees in their efforts to accelerate market deployment of renewable energy technologies.