

International Renewable Energy Agency (IRENA)

**The role of IRENA in the context of other
international organisations and initiatives**

December 2008

I. Introduction

After intensive preparations involving more than 60 countries, the International Renewable Energy Agency, IRENA, will be founded on 26 January 2009, in Bonn. Mandated by governments worldwide and acting as a global voice for renewable energy, IRENA will act as the main driving force in promoting a rapid transition towards the widespread and sustainable use of renewable energy.

There is a growing consensus that in order to cope with the challenges of our time, such as increasing global energy demand, global warming and rising energy prices, the world needs a massive scale up in renewable energy within a short period of time. This massive increase requires mobilization of human, technological and financial capacities on a global scale. Thus, IRENA intends to provide global leadership and expertise so to ensure renewable energy rapidly reaches its potential.

IRENA will close an institutional gap. It is the first intergovernmental organisation to solely concentrate on renewable energy and offer support to industrialised and developing countries alike. IRENA will provide practical advice, and thus support member countries to improve their regulatory frameworks and build capacity. The agency will facilitate access to all relevant information, including reliable data on the potential of renewable energy, best practices, effective financial mechanisms and state-of-the-art technological expertise.

There are several organisations or initiatives that share IRENA's aim to promote the use of renewable energy. Amongst these organisations and initiatives are the following: the International Energy Agency (IEA), the United Nations Environment Programme (UNEP), the United Nations Development Programme (UNDP), the United Nations Industrial Development Organisation (UNIDO), the World Bank, the Renewable Energy and Energy Efficiency Partnership (REEEP) and the Renewable Energy Policy Network for the 21st Century (REN21). However, these organisations have different missions, focus, operate with individual mandates and/or on particular levels (local, regional, global).

In the interest of all countries being members of several organisations and taking into account the challenge of massive and rapid escalation of renewable energy, unnecessary duplication of work, and thus, wasting of resources should by all means be avoided. There is more than enough work for each organisation, requiring optimisation of capacities and close cooperation to create synergies.

In order to establish close cooperation and build the foundation for a trust-based relationship, the initiators of IRENA started in June 2008 and continued to meet and consult with the other international players. Initial ambiguity gave way to a clear support for the foundation of IRENA and the welcoming of synergies and cooperation opportunities. All international organisations understand the mission of IRENA and are open for cooperation. Some have explicitly encouraged IRENA to be ambitious in taking over a leadership role for the massive deployment of renewable energy. In most cases, opportunities for cooperation have already been identified, which need further elaboration when IRENA starts operating. The first Director-General of the Agency will thus be able to expand existing contacts and initiate the next concrete steps for collaboration.

The following paper intends to outline the activities of the above listed international players and the potential options for cooperation with IRENA.

II. Comparing the activities of IRENA with those of other organisations

The activities of the relevant organisations and the most interesting fields of cooperation have been identified using the structure of IRENA's draft initial work programme of August 2008. This work programme was drafted in line with the objectives and activities outlined in the Statute, and was meant to provide a framework for the first phase of IRENA's operation.

As the bold headlines are similar in many organisations, it is important to consider the specific focus, the actual volume and the approach of the activities as well as the countries and partners involved.

IRENA

IRENA will act as an international governmental organisation, focusing on the promotion of renewable energy and welcoming all UN members to join. Its main tasks are to provide relevant policy advice and assistance to its members upon their request, improve pertinent knowledge and technology transfer and promote the development of local capacity and competence in Member States.

Considering the tasks of IRENA, an annual budget of US \$25 million and a team of 120 are a realistic approximation in order for it to properly operate for the first years.

IRENA will be unique in combining:

- a clear mandate from its member governments;
- a worldwide geographical scope, including industrialised and developing countries;
- a complete range of services to support governments in facilitating the use of renewable energy;
- high level expertise in the use of all forms of renewable energy and their integration into energy systems, covering technological, economic, institutional, cultural, social and environmental aspects;
- an extended network base with research and government institutions worldwide;
- global collection, elaboration and dissemination of information and knowledge concerning renewable energy, and lastly;
- methods, tools and networks for promoting experience exchange and accelerating an international learning process.

In addition, IRENA's work will explicitly take into account cultural and social aspects. This is especially important as renewable energies offer opportunities for more decentralised energy supply systems, involving changes in behaviour and governance structures. Thus, mutual learning between various economic, environmental, social, cultural and political conditions is essential for tackling the challenges.

IRENA's Initial work programme (2nd draft, August 2008) outlines the future activities of the Agency. The following table summarizes the intended basic tasks and initial activities.

A. Developing a comprehensive knowledge base	<ul style="list-style-type: none"> • Taking stock of existing knowledge and activities • Developing a reporting system and an extensive database • Developing methodologies for the use of various tools promoting renewable energy
B. Networking	<ul style="list-style-type: none"> • Cooperating with other organisations, institutions and networks • Consulting with experts from academia and industry
C. Communication	<ul style="list-style-type: none"> • Establishing an internet-based communication platform • Strengthening international dialogue on renewable energy • Developing a key publication • Building relations with the media
1) Advising national governments on developing integrated approaches to promoting renewable energy	<ul style="list-style-type: none"> • Comprehensive advice on selecting and adapting energy sources, technology and system configurations and organisational and regulatory frameworks • Helping countries to make the best use of available funding • Promoting experience exchange between countries • Assembling a toolbox of successful methodologies and policies
2) Integrating renewable energy into the urban environment	<ul style="list-style-type: none"> • Promoting structured experience exchange between countries and cities • Contributing to capacity building • Supporting the development of appropriate local policies
3) Strengthening strategic cooperation in rural areas	<ul style="list-style-type: none"> • Developing integrated approaches for the use of renewable energy in rural areas, while in close cooperation with development organisations, stake holders and experts • Supporting experience exchange within and between countries and regions • Developing a toolbox of technical, organisational, cultural and political innovations for rural electrification and rural thermal energy supply
4) Identifying training needs and opportunities for developing renewable energy	<ul style="list-style-type: none"> • Facilitating international exchange of experiences and development of coherent methodologies • Developing different approaches for different sources of renewable energy • Contributing to a shared pool of knowledge and methods
5) Increasing the proportion of renewable energy used in existing energy systems	<ul style="list-style-type: none"> • Identifying and promoting new technical and managerial approaches to the design and management of energy systems and grids appropriate to renewable energies • Producing a series of reference reports describing the current situation, presenting best practice examples and – where useful – proposing standardised approaches and norms.
6) Promoting technology transfer	<ul style="list-style-type: none"> • Organising a conference on discussing possible funding mechanisms and strategies for technology transfer • Evaluating specific technology transfer projects in different countries; development of an appropriate assessment methodology
7) Raising the profile of renewable energy in the energy and climate debate	<ul style="list-style-type: none"> • Developing concepts and policy briefings. • Producing publications, promoting the role of renewable energy in reducing greenhouse gas emissions, combating climate change and guaranteeing the security of energy supply • Developing scenarios for the use of renewable energy • Being present at international climate conferences, observing and informing

IEA – International Energy Agency

The International Energy Agency IEA, based in Paris, is an autonomous agency linked to the OECD. It was created in 1974 by 16 OECD countries for ensuring energy security after a politically motivated oil shortage and a doubling of the oil price by the OPEC. Today, it acts as an energy policy advisor to its 28 member countries, all of whom are OECD members, and therefore, no emerging or developing countries are included.

IEA is steered by a governing board. The votes of the member countries are weighted according to their volume of oil consumption.

The objectives of the IEA are: Energy security, economic development and environmental protection. The IEA budget for 2008 equals € 24.5 million and it staffs about 190 employees.

The IEA has designed arrangements for emergency preparedness, analyses and monitors developments on the international oil and gas market, undertakes policy analysis and co-operation, collects and processes data (World Energy Outlook), fosters energy technology, and among others focuses on energy efficiency and environmental issues. It also produces extensive energy statistics that also cover some non-IEA countries. The World Energy Outlook is the IEA's main publication, quoted as an important reference worldwide. IEA's regular country reports review the respective energy policies.

Since the IEA covers all forms of energy with a traditional focus on conventional energy, only a small, yet growing part of IEA activities, is dedicated to renewable energies, strongly supported by targeted voluntary contributions,. The International Technology cooperation of the IEA is organised in so-called Implementing Agreements, whereby nine concern renewable energy technologies. The agreement on Renewable Energy Technology Deployment (RETD), involving 10 countries, is in charge of cross-cutting issues.

IRENA and the IEA fundamentally differ in three regards: IRENA focuses on renewable energy, whereas the IEA covers all energy issues with an emphasis on the conventional energy system relying on fossil and nuclear sources; IRENA is open to all UN members, whereas the IEA is limited to OECD countries and, IRENA will look beyond the traditional energy supply sector, because renewable energies involve a much larger part of the economy than just traditional fuels (building sector, agriculture etc.).

Comparing IRENA's work programme with IEA activities leads to the following opportunities for cooperation, which have also been discussed at joint meetings:

- IRENA will deploy much larger resources on renewable energy than the IEA. Offering in-depth expertise on renewable energy, IRENA can support the IEA in giving renewable energy a stronger emphasis in its cross-cutting activities (e.g. Energy Technology Perspectives, World Energy Outlook, statistics etc.);
- the IEA maintains extended data reporting mechanisms in order to upkeep its statistics and policy databases. IRENA will have similar needs, but with a different perspective. In order to avoid duplications in member countries and in the organisations it will be **important to cooperate on reporting systems**;
- regarding the Implementing Agreements, cooperation should contribute to make best use of the results of the technical and ecological issues and the need for further research.

UNEP – United Nations Environmental Programme

UNEP is in charge of environmental issues within the UN and has an extended worldwide network of offices and specialised structures. The UNEP Energy Programme makes up about 3 percent (\$12 million) of UNEP's total expenditures¹. Working with a variety of partners, UNEP helps countries to develop and use tools for analyzing energy policies and programmes, climate change mitigation options, energy sector reforms and the environmental implications of transport choices.

Special attention is given to helping financial institutions improve their understanding of investment opportunities in the renewable energy and energy efficiency sectors. UNEP works with local banks to establish end-user financing mechanisms for renewable energy technolo-

¹ http://esa.un.org/un-energy/pdf/un_energy_overview.pdf, p. 30.

gies and works with the international finance industry (including banks and insurance companies) to lower risks for larger projects and to break down financial barriers. It also provides advice to developing nations' governments on broad policy approaches to bolster renewable sources of energy. It also supports the creation of an enabling environment for small - and micro-businesses in the area of renewable energy. The goal of UNEP's Energy Programme is to bring a longer term, environmental dimension into energy sector decisions.

The UNEP Energy Programme is coordinated by the Energy Branch, located in Paris. The Energy Programme incorporates a wide range of structures that include the URC (UNEP Risø Centre), BASE (Basel Agency for Sustainable Energy), GNEED (Global Network on Energy for Sustainable Development), REED (Rural Energy Enterprise Development) and SEFI (Sustainable Energy Finance Initiative). In addition, regional UNEP offices contribute to the programme, mainly focusing on projects and their networks. Work on renewable energies is mostly embedded in more comprehensive approaches. Within UN Energy - a coordination of UN bodies dealing with energy issues – UNEP chairs the sub-committee dealing with renewable energies together with the Food and Agriculture Organization.

Comparing IRENA's work programme with UNEP activities leads to the following opportunities for cooperation, as also discussed in a joint November 2008 meeting:

- UNEP's **advanced expertise on financing mechanisms** by SEFI/BASE can be most valuable in complex policy advice by IRENA and eventually help define complementary IRENA's services meeting the needs of its members in financing renewable energy policies and projects.
- Cooperating with the UNEP energy branch and the multiple projects and networks can considerably contribute to IRENA knowledge base and in return provide updated and well structured information. Also, co-operation on tools and methods could be most interesting.

UNDP – United Nations Development Programme

As the UN's global development coordinator, UNDP advocates for change and connects countries to knowledge, experience, and resources to help people build a better life. UNDP supports energy activities to reduce poverty and achieve sustainable development objectives at the local, national, and global level. While annual programme expenditures are about US \$5 billion, approximately US \$53 million is devoted to providing access to sustainable energy services². UNDP works mainly at the project level, but is also engaged in strengthening national policy frameworks. UNDP's energy efforts are strongly focused on access to energy and poverty reduction. Renewable energies play an important role, but, together with energy efficiency and conventional energy sources, are only one of several options.

Opportunities for cooperation with IRENA must be further explored while building up IRENA's activities. Discussions can include the following:

- Regarding UNDP's experience in promoting rural energy services and IRENA's in-depth expertise on renewable energy, cooperation in this field may contribute to a stronger role of renewable energy in rural development and poverty reduction.
- IRENA can offer specialised support and learn from UNDP's wide range of experiences.

² UNDP multi-year funding framework report 2007. Programme expenditure 2004-2007: 14.3 billion.

UNIDO – United Nations Industrial Development Organisation

Established in 1966, UNIDO promotes the creation of wealth and tackling poverty alleviation through manufacturing. Energy and environment is one of its three inter-related thematic priorities and promotes cleaner and efficient use of energy. UNIDO also facilitates productive activities in rural areas by providing modern and renewable forms of energy and enhances the use of renewable energy for industrial applications. The overall budget equals US \$382 million (2008-2009)³. Only a small fraction is devoted to renewable energy issues, most of which is embedded in technical cooperation programmes. UNIDO chairs UN-Energy, the coordination of UN bodies dealing with energy issues.

Opportunities for cooperation include the following:

- UNIDO is strongly focused on renewable energies for productive use and industrial application in Africa: cooperation should ensure complementarity.
- coordination and selective cooperation, especially with regard to industrial application of renewables, may contribute to best use of resources in order to promote renewable energy.

World Bank

Among its many tasks, the World Bank Group is one of the largest multi-lateral lenders for energy worldwide (US \$4.2 billion). It contains a dense worldwide network of offices with 10,000 staff members. The World Bank's objectives in the energy sector are: poverty alleviation, energy security and climate change mitigation. Renewables play an important role and the budget is increasing, but still accounts for less than 30 percent of the bank's total lending for energy. Within the renewable energy sector, large hydro-power commitments account for more than 60 percent.⁴

The following issues present opportunities for developing cooperation:

- financing mechanisms for renewable energy will be at the centre of common interests - meeting the specific renewable energy financing problems and finding ways to conveying increasing funds, to this sector are issues where cooperation can bring an added value;
- possibilities on cooperating on World Bank's toolkits for project financing should be discussed, and;
- as the World Bank is one of the largest lenders for energy, IRENA can support it to give renewable energy a greater role in the banks investments in developing countries.

REN21 – Renewable Energy Policy Network for the 21st Century

REN21 is a global policy network that provides a stakeholder forum for international leadership on renewable energy. Originated at the first International Renewable Energy Conference (Bonn 2004), REN21 connects governments, international institutions, non-governmental organisations, industry associations, and other partnerships and initiatives.

³ Annual report 2007

⁴ <http://siteresources.worldbank.org/INTENERGY/Resources/renewableenergy12407SCREEN.pdf>

With a budget of US \$1 million⁵ and less than 10 employees, REN21 concentrates on policy, advocacy, and exchange. Its main product is the annual Renewable Energy Global Status Report (GSR). Moreover, since Bonn 2004, it has been involved in the International Renewable Energy Conferences (IRECs) and the monitoring of the corresponding action programmes.

REN21 and IRENA share the same vision. Whereas REN21 is a global policy network with broad participation of governments, international organisations and NGO's, but without legal status and limited mandate, IRENA will be a global intergovernmental agency with a clear mandate from its member countries and much larger financial as well as personal resources. Cooperation opportunities, as also discussed in a joint meeting, include the following:

- as a multi-stake holder network, REN21 will be a valuable partner for IRENA in the endeavour to involve other stake holders than member governments and institutions;
- **the most important aspect will be to develop close cooperation concerning reporting on renewable energy and concerning the support of international fora for policy makers.** Both areas are of vital interest to IRENA and REN21.

REEEP – Renewable Energy and Energy Efficiency Partnership

REEEP is a Public-Private Partnership launched at the Johannesburg World Summit in 2002. It works with governments, businesses, industry, financiers and civil society to accelerate the global marketplace for energy efficiency and renewable energy.

The private sector is a key focus for REEEP. Business models, finance facilities and capacity building initiatives are developed to enable new enterprises to enter the clean energy sector. All REEEP projects occur in emerging markets and developing countries. It actively facilitates financing for sustainable energy projects and structures policy initiatives for clean energy markets on the ground. REEEP has less than 15 staff members in eight regional secretariats and finances its projects through specific fundraising. Together with REN21, it initiated a joint project called **REEGLE** (Information Gateway for Renewable Energy and Energy Efficiency).

As has been discussed at a meeting, opportunities for cooperation include:

- for IRENA, REEEP is a most interesting partner for experience exchange. Cooperation on single projects is conceivable. REEEP's worldwide network of partners may be helpful in supporting IRENA's outreach;
- the internet platform REEGLE is an important information source on renewable energy, and thus, cooperation is highly desirable. REEEP has offered to use REEGLE as a common information platform.

⁵ Regular contributions, additional project funding.

III. Conclusion – summing up the cooperation opportunities

A detailed comparison of IRENA's structure, tasks and draft initial work programme with the ongoing activities of other international organisations, as well as repeated discussions with representatives from most of these organisations lead to the following conclusions.

IRENA will play a central role in the context of the international organisations dealing with renewable energy issues by:

- filling a vacant role as dedicated worldwide inter-governmental organisation for renewable energy; providing leadership and expertise for a massive scale-up of renewable energy use;
- expanding and qualifying available resources (financial, human, institutional, expertise, etc.) for promoting renewable energy;
- providing transparency concerning the manifold landscape of ongoing activities and encouraging cooperation;
- offering support to the ongoing activities through in-depth expertise, reliable, comprehensive and up-to-date information, experience exchange, tools and methods;
- strengthening advocacy for renewable energy at all levels, and;
- facilitating networking and information exchange.

Good coordination and cooperation offers many opportunities for boosting existing and starting additional activities. Strengthening all partners in the joint endeavour to promote renewable energy is the key to IRENA's success.

The following priority areas for intensive cooperation have been identified:

- **developing and maintaining appropriate reporting systems (with IEA, REN21);**
- **providing and facilitating fora for policymakers at high levels (with REN21);**
- **developing and providing easily usable information gateways (with REEEP), and;**
- **improving the access to financing mechanisms (with UNEP).**

Overall, IRENA shall promote a collective learning process that includes the involvement of all international organisations in experience exchange, the mutual information on renewable energy activities and the development of specific formats for IRENA's support to other organisations.

In the context of all international governmental organisations, the role of IRENA will be to lead the global efforts to ensure to sustainable energy supply and that renewable energy contributes to attaining access a low carbon future.

Overview:

Structures and renewable energy activities of International Organisations – Cooperation priorities for IRENA

IO	Full name	Type	Main renewable energy contribution	Cooperation Priorities
IEA	International Energy Agency	OECD Agency	Renewable energy working party; Policy Database; Reporting System; Analytical work; Reports & workshops	Reporting system methodologies knowledge base coordination on priority issues
UNEP	UN Environmental Programme	UN	Global Network on Energy for Sustainable Development; Single projects; Financing know-how and networks; Analytical work, tools	knowledge base Financing mechanisms experience exchange, support for projects
UNDP	UN Development Programme	UN	Energy for Sustainable Development; Rural Energy Programmes ; Huge number of single projects	experience exchange, support for projects
UNIDO	UN Industrial Development Organization	UN	Integrating RE in industrial projects; Single projects	experience exchange, support for projects
WB	World Bank	Bank	Lending, Technical assistance, Policy advice	experience exchange, support for projects; RE Toolkit
REN21	Renewable Energy Policy Network for the 21st century	Network	Renewables Global Status Report IREC support	Renewables Global Status Report International fora for policy makers outreach to other stakeholders
REEEP	Renewable Energy and Energy Efficiency Partnership	Partnership NGO	Small funded projects worldwide REEGLE database	information platform REEGLE