

International Institutional Arrangements in Support of Renewable Energy

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INTRODUCTION

This chapter updates the analysis and proposals contained in the Thematic Background Paper (TBP) for the 2004 International Conference for Renewable Energies (hereafter Renewables 2004) ‘International Institutional Arrangements. Bundling the Forces – but How?’. The TBP’s point of departure was that renewable energy (RE) is an essential component of sustainable development, and should provide a bigger proportion of the world’s energy supply.

The TBP provided an overview of the international institutional landscape and identified key constraints that need to be addressed, most efficiently at the international level. The paper concluded that that the existing RE landscape did not seem optimal to enable RE to grow. Two pathways were suggested that could increase the development of RE as a source of complementary/alternative energy in the future. The first consists of developing key principles and guidelines for ‘best practices’, compiled in a *Code of Conduct/Code of Best Practices on Promoting Renewable Energy* in the overall context of global sustainable energy development. Second, the TBP suggested a *new type of international organization* to ensure that RE becomes an essential element of global efforts at sustainable energy development.

These pathways are distinct yet complementary and mutually reinforcing processes, and both involve multi-stakeholder participation, considered essential to bundling the forces in a highly dispersed institutional landscape. It is essential not to isolate and compartmentalize renewable energy, but to design policies in

such a way that the interaction, competition and substitution between the various energy sources and energy industries are properly taken into account, and guided towards an overall more sustainable form of global energy. Single-minded promotion of renewable energy is less relevant than a policy and institutional context that favours a sustainable energy mix for the global community.

In this field the creation of the Renewable Energy Policy Network for the 21st Century (Ren21, www.ren21.org) is a key outcome of Renewables 2004. We shall briefly recall the main issues related to institutional arrangements for RE, and revisit our earlier recommendations in the light of Renewables 2004 and Ren21.

EXISTING INTERNATIONAL INSTITUTIONS AND ACTIVITIES: A BRIEF OVERVIEW

This section begins with a brief typology of the existing international landscape, and then proceeds to examine issues that should be addressed by these international actors for RE to grow. A third section will indicate shortcomings of the current situation.

Stocktaking: an overview of the international RE landscape

The brief stock-taking exercise produced an extensive list of activities undertaken by international actors on RE. The following typology is one of the many according to which these numerous and varied institutions and activities can be distinguished. The RE landscape is very dynamic and constantly changing. The overview in Table 7.1 is therefore not exhaustive and merely provides some examples.

Action required for the promotion of RE

The overview of actors on the one hand shows that many actors deal directly or indirectly with RE, from the project to the international policy level. On the other hand, no one existing institution brings together all stakeholders at a global level, which is arguably where many constraints hindering RE growth should be addressed.

Some of the key areas where coordination is needed for RE to be able to grow are the following:

- *Information.* Research is needed into the environmental aspects and costs of every energy option. This is a precondition for the implementation of measures that are often proposed to increase the share of RE (e.g. 'internalize environmental costs into the price of energy').

Table 7.1 *Overview of the institutional renewable energy landscape*

Intergovernmental organizations, whose primary activity is energy related	Examples include the International Energy Agency (IEA), the Organización Latinoamericana de Energía (OLADE) and the Energy Charter Conference and Treaty. On the one hand, these organizations have expertise, a governmental support base, and in some cases the authority to make binding rules. On the other hand, membership of most of these organizations is limited geographically or otherwise, and none have RE as a main focus
The World Bank Group, and the Regional Development Banks	These are significant players, with an important RE impact in developing countries. They finance a significant number of RE projects throughout the world, ranging from technological assistance to energy sector reform, sometimes with private sector co-financing
Regional organizations	Examples include the European Union (EU), the Association of Southeast Asian Nations (ASEAN), the Southern African Development Community (SADC), and Asia-Pacific Economic Cooperation (APEC)
The Global Environmental Facility (GEF)	The GEF (through implementing agencies) operates more than 100 programmes for the promotion of energy production and consumption from RE (backed by private sector development and sometimes by energy sector reform), mainly with a domestic scope. Projects do not address issues such as taxation, subsidies or trade law on a global scale
The UN system	The UN Regional Economic Commissions play an important capacity building role (e.g. United Nations Economic Commission for Europe (UNECE) or the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)). Globally, the United Nations Environment Programme (UNEP) and the United Nations Development Programme (UNDP) are important actors (cf. the Global Network on Energy for Sustainable Development, the UNDP Initiative for Sustainable Energy (UNISE), and the World Energy Assessment). Many other specialized UN agencies have addressed RE within their niche (for example the United Nations Department of Economic and Social Affairs (UNDESA), the World Health Organization (WHO), and the Food and Agriculture organization of the United Nations (FAO)). The Commission on Sustainable Development (CSD) includes energy as a major component of its work plan for the coming years. An interagency group 'UN-Energy' has been created to help ensure coherence in the UN response to the WSSD in general and its energy-related outcomes in particular
The World Summit on Sustainable Development (WSSD) and its Plan of Implementation (and the resulting 'type II' partnerships)	The WSSD Plan of Implementation, while not binding, is the broadest international instrument with the most extensive references to renewable energy and energy efficiency yet produced by the world community. It focuses on development, implementation, technology transfer and rapid commercialization of RE. It sees energy as key to the eradication of world poverty, and to change of unsustainable consumption and production patterns. More than 20 type II (public-private) partnerships are active in RE, for example the Renewable Energy and Energy Efficiency Partnership (REEEP). The Political Declaration resulting from Renewables 2004 reaffirms the WSSD commitment

Non-Governmental Organizations (NGOs)	The NGO community ranges from green advocates (most environmental NGOs have a work programme on energy and climate change), to NGOs focusing specifically on energy, to consumer interest groups. Examples are the World Energy Council, the World Council for Renewable Energies, the World Wind Energy Association, the International Network for Sustainable Energy. Some charitable foundations also support RE activities
The research community	This group includes a wide variety of actors, ranging from fundamental research at universities to applied research to technology development specifically for commercial purposes
The private sector	Individual companies involved in energy supply (utilities, increasingly working in more than one country), technology supply and research and development (R&D), but also groups such as industry associations (e.g. Eurelectric) and the World Business Council on Sustainable Development

- *Demand.* There needs to be a substantial and sustained demand for renewable energy at economic conditions that make investment in supply a long-term viable business proposition; at present, such demand is hindered by factors that make RE not competitive with other energy sources. Institutional arrangements to support demand can be conceived: for example, regulating the cyclic demand for energy to match the typically varying available RE supply, or prescribing RE inclusion in building standards.
- *Markets.* RE can grow if there are functioning – and competitive – national and regional markets where the advantages of renewable energy can compete effectively against the advantages of incumbency (in terms of established suppliers and network operators, established and proven technologies, established regulatory and fiscal conditions and established political and institutional alliances and support). Such RE markets need an enabling regulatory framework that encourages RE, which in turn depends on political will. Expanded markets in industrialized countries reduce the cost of technologies and therefore accessibility for developing countries. Incumbents (such as existing network operators, in particular in countries where renewable energy has not as yet been fully embraced in actual practice and mentality by existing energy monopolies) may obstruct interconnection, or access to domestic and international markets; industry associations naturally reflect vested positions rather than a pro-RE perspective. The same applies to transmission charges, which as a rule are not geared towards easy and economically practical feed-in of renewable energy into grids. Equally important is the competitiveness of RE markets themselves.
- *Investment, taxation and subsidies.* Investment in renewable energy facilities must rely on a favourable, stable framework in terms of international law, national regulation and taxation, a framework that minimizes the much

greater risk of long-term RE investments in particular against instability and revocation of committed subsidies and support systems. Taxation and state support/public subsidies regimes must create a level playing field between renewable and conventional energy, with some element of an initial 'affirmative action' to counter the handicaps of renewable energy. Targeted and efficient subsidies that are limited in time but stable may be a tool to encourage RE investment (such subsidies must be designed so as to encourage further research and development; compatibility with trade rules is a delicate issue, and demands a coordinated international approach). Regulatory and tax regimes that encourage RE investment should be subject to external, enforceable disciplines that affect their credibility and stability. 'Greening' of investment protection is one of the very few methods available that is likely to enhance the investment climate for RE investment and RE entrepreneurs.

- *Economic incentives.* Developing and applying innovative technologies requires economic incentives. New technologies as a rule cannot be imposed by state action, but have to emerge out of entrepreneurial action in markets – and that requires a favourable legal, regulatory and fiscal setting. There may have to be privileges for developing countries, but they must not undermine the economic incentive for developing and widely applying technological innovation.
- *Infrastructure.* Available infrastructure should be accessible – technically and legally – to renewable energy. The creation of new infrastructure (inter-connectors) necessary for RE trade should be encouraged and some public assumption of long-term commercial risk needs to take place.
- *Trade.* Cross-border trade in increasingly integrated and liberalized energy markets needs to be structured so that renewable energy is not penalized by domestic regimes which encourage – and protect – only domestic production of renewable energy. Cross-border trade rules also need to be responsive to the competition between environmentally more favourable and environmentally less favourable energy. The issue is a contentious one within the World Trade Organization (WTO), but given that different countries are endowed with RE opportunities to a different degree, international trade in, for example, electricity generated by RE must be specifically addressed.
- *Governance system.* The many elements constituting the governance system of the global economy (mainly international trade, investment, environmental treaties) should not create obstacles for RE investment and trade, but rather provide a protective, encouraging and facilitating effect. An important issue for international cooperation is protection of intellectual property, protecting investments in R&D until RE can break out of high-cost niche markets. The protection of intellectual property may be a particular concern in certain developing countries where the opportunities for RE are deemed to be high.

Current situation: constraints

This brief overview shows a highly compartmentalized RE landscape with little systematic pooling of information, analysis and coordination at an international level. There is a lot of engagement for RE but it is mostly dispersed and diffuse. All activities are relevant, but not sufficient to create more efficiency and synergies (e.g. sharing lessons, establishing common standards). One important consequence of this is that there is no comprehensive assessment yet of the effectiveness of the different policies and activities, or of the impact they have on each other (though assessments of effectiveness of policies are under way). Nor is there a clear view on what the overall financial commitments for RE projects are, how they evolve and how they compare with measures for conventional energy (e.g. coal subsidies, or support for decommissioning of nuclear plants).

Box 7.1 EXAMPLE OF EFFECTIVENESS ASSESSMENT: THE RENEWABLE ENERGY AND INTERNATIONAL LAW PROJECT

The Renewable Energy and International Law Project (REILP) is supported by the UK Foreign Office's Renewable Energy and Energy Efficiency Partnership, the law firm Baker & McKenzie and several universities (Yale, the Centre for Energy, Petroleum and Mineral Law and Policy at the University of Dundee, and others). Other project partners include the World Conservation Union (IUCN – through its Environmental Law Programme), the United Nations Environment Programme (UNEP), the Australian and US governments, and the secretariat of the North American Free Trade Agreement (NAFTA). The project is looking at ways in which international law can be used as a tool to support the development of renewable energy, and, conversely, ways in which it may currently be impeding that development.

It has not been possible to identify, in a clear and convincing way, which initiatives work, which do not, and why. While success and failure are always relative, and conditioned upon the particular context, a successful case has a potential to serve as a model, and a failure has the potential to provide some pointers towards the need for a different approach. An assessment by an independent, respected and expertise-based institution or institutionalized processes appears imperative to find out how to make promotion of renewable energy work in practice, and not just in organizational public relations.

No international agency identifies wholeheartedly with the issue of global sustainable energy (in particular, energy conservation, energy efficiency, renewable and climate-friendly energy) and focuses on it – in terms of agenda setting, initiatives for international negotiation of principles, rules and standards, setting up a global stakeholder consultation process and relationship-building with all relevant actors, including the private sector. Sustainable energy does not have an 'international home'. This fact may contribute to uncertainty about many

initiatives' lasting effect, and to the fact that many primarily look like experimental showcase activities.

The survey also provides little evidence that RE issues have permeated non-RE energy (or related) activities, for example the negotiation, amendment and application of international treaties related to trade, investment, environment and energy, or technical and financial assistance in other areas of energy. It may well be that many environmental treaties and initiatives are being promoted which in effect do not favour, and may hinder, the emergence of a viable RE activity. It is only now that the specific impact of WTO rules (favourable and unfavourable) on RE industries is being analysed in more depth. For example, renewable energy would benefit from an open cross-border energy market, but also needs protection from competition of energy produced under lax safety conditions or without internalization of external costs – the 'energy dumping' issue.

The compartmentalized nature of the response of international actors to the RE challenge may be due to their internal organization: most of these agencies are classic intergovernmental organizations with only a very limited participatory role for non-state actors (in RE, primarily energy companies, but also NGOs, banks, professional firms and associations, and academic institutions). This suggests that it would be inappropriate to call for a 'World Energy Agency' in the classic model, but rather for an international institutional platform that is 'owned' by all significant stakeholders. It should be the institutionalized form, secretariat and focus of a network that combines all relevant interest, influence, expertise, financing and regulatory power.

There is a need for instruments (both institutional and of the nature of rule- and standard-setting) that can:

- assess national/regional/global impacts of RE policies;
- exercise expertise-based 'agenda power' by launching new initiatives encompassing stakeholder consultation;
- act as forum, vehicle and secretariat for the negotiation and continuous adaptation of principles, rules and standards for designing RE policies, assessing RE initiatives and integrating RE objectives into other relevant organizational activities.

In particular, trade is an issue that cannot be dealt with successfully by a national or sectoral approach. In consultation between the custodians of trade rules (mainly the WTO, the NAFTA secretariat, Asian and Latin American trade organizations, and the European Union), it is necessary to develop, based on already available precedent, a set of guidelines and principles that helps to apply available trade rules (non-discrimination – justification for non-protectionist, guideline-covered renewable energy; subsidies; dumping and state aids – against energy produced below international standards) in a way that facilitates cross-

border RE trade, combats RE-based protectionism (by purely national schemes) and creates a truly level playing field in the competition between RE and conventional energy and energy products.

The functional deficits of existing actors can be summarized as follows:

- *Area of activity.* There do not seem to be real gaps in substance (e.g. market reform, capacity-building, specific RE sources) covered by existing actors, but current coordinated research is insufficient to fill the information gaps that prevent coordinated policy-making. It is important to keep all options open, including through support of research into future sources that may at present be in a very early stage of development.
- *Assessing RE potential.* Here a clear gap can be identified. The numerous existing initiatives and projects indicate what is being done to promote RE, but this activity hides the fact that many countries do not have any RE activities, or may not even be aware of the specific RE potential present within their territory. Whereas many institutions try to influence decision-makers, none is specifically mandated to consult governments on realizing the RE potential of their country.
- *Multi-stakeholder participation.* No single institution has been found where all stakeholders are represented and are able to contribute effectively in terms of their expertise and agenda-setting capacity.
- *Structures and finance.* Many activities are designed around specific studies, projects, reforms or experiments. There does not seem to be an institution that is able to act on RE on a global scale, independent of projects, and with stable, possibly governmental, funding.

ADDRESSING THE CONSTRAINTS: TWO POTENTIAL PATHWAYS FOR PROGRESS

The overview of existing activities at the international level shows that there is no need for a new body to *invest* in RE, but there is a need for sharing experience, expertise and information. RE needs an institutional platform at the international level and a relevant international code of best practices in standards and policies – for governments, independent energy regulators, international organizations, the private sector, academic institutions and NGOs – on designing, pursuing and integrating RE objectives in overall energy, environmental, investment, fiscal and trade policies and strategies.

Two parallel processes can be envisaged to address these issues, one leading to an institutional platform, the other leading to a compilation of guidelines, standards and best practices. The two are interrelated: the proposed negotiation of a Code of Conduct, or Code of Best Practices, on Renewable and Sustainable Energy would bundle the relevant forces in a consultative process; it should be

serviced by an interim secretariat. The proposed outcome – the Code of Conduct – would then lend itself as one of the key mandates of what is proposed: a global institutional platform for sustainable energy.

A coordinated international approach must, however, take into account that energy policy remains a largely national prerogative. New international instruments would need to reflect national sovereignty considerations and respect the principle of subsidiarity. They would only come into play where action at the international level is more efficient.

An institutional platform

We argue that for RE and sustainable energy to realize its full potential, a permanent institutional platform would be required. Two possibilities can be distinguished. They are not mutually exclusive and may happen sequentially.

The possibility should not be excluded that an existing institution could take the lead on global RE issues. At the same time, any existing institution would need to be restructured if it were to serve the purpose of convening all stakeholders as suggested. Any institution should not be a conventional intergovernmental agency, but rather an institutionalized and stable focal point of a network, grouping together the main stakeholders. The governing board should not be composed exclusively of state representatives, but rather of existing international agency representatives with a stake and expertise in RE (for example, the International Energy Agency (IEA), the World Bank, the United Nations, Asia-Pacific Economic Cooperation (APEC), the Organización Latinoamericana de Energía (OLADE), the Association of Southeast Asian Nations (ASEAN), the International Atomic Energy Agency (IAEA)), of governments, of private financial institutions, energy companies, energy professionals, industry associations, NGOs and civil society.

One option, possibly a necessary first step, would lead to the creation of a *specialized RE agency*. Such an agency would be the ‘international home’ for renewable energy. Such an organization had been proposed prior to Renewables 2004 and was provisionally named IRENA (the International Renewable Energy Agency). It could be created rather quickly, and it would be able to perform functions such as coordination of policies, agenda-setting and the monitoring of a Code of Conduct or Code of Best Practices. At the same time, it would remain a specialized RE agency, and the challenge would be to integrate its work within the broader context and, ultimately, policy decisions on sustainable energy choices. One important task for the institution would be to inform and advise governments about RE options. It should play a subsidiary role, and focus on countries that have an underdeveloped RE potential.

A second outcome could be an *energy for sustainable development agency*. This would be a global organization concerned with setting agendas, developing expertise, organizing networks and providing technical assistance in the field of

energy. It is suggested that energy, as the world's most important industry, deserves and requires a separate international agency. Its mandate would have to be focused on promoting a sustainable model of energy supply with a primary focus on energy conservation, energy efficiency and renewable energy promotion. This may be a distant target, but arguably it is a logical endpoint of true integration of new energy sources in global energy policy.

The value added by any new institution to the range of existing institutions would be twofold. First, RE would be a key element of the institution's work from the start, instead of a small component, as is often the case in existing models. Second, the institution would have a global perspective, bring together all stakeholders and have an explicit mandate for sustainable energy.

Code of Conduct/Code of Best Practices related to Renewable Energy

A non-binding code could be an important catalyst for coordinated action by providing a source of *de facto* rules and standards for energy policy and development – an enabling framework for actors in RE. Such a code should be developed through a mechanism that involves all stakeholders: existing institutions active in the field of energy (e.g. the IEA, the European Union, but perhaps also important actors that traditionally do not deal with RE, such as the Organization of the Petroleum Exporting Countries (OPEC) or the IAEA), the research community, national agencies, the private sector, energy utilities, the World Bank and the regional Development Banks, consumers, banks and civil society.

The aim at this stage should thus not be a multilateral treaty. The experience with such treaty-making is patchy. It is much more difficult to achieve a treaty, and once it is completed, ratifications are as a rule very hard to get – unless the treaty itself is of little practical significance.

Codes and other non-binding instruments have been criticized for being too weak, and without real impact. However, a comprehensive text that has been developed and agreed by stakeholders can give a feeling of ownership, which makes it more likely that policy-makers or governments would draw on the content of the code. It may therefore be more feasible to start with an instrument that is not legally binding, but may acquire a persuasive authority – and some legal effect – over time. The condition for success is that such an instrument represents a progressive consensus of the main stakeholders while being suitable for realistic and practical application. If such a pre-codification works, the next step may include the conversion of a code into a legally binding instrument.

Issues that could be covered in the code include:

- phasing out of subsidies to non-sustainable energy systems;
- protection of investments: guaranteed subsidies for a limited time; initial

‘affirmative action’; full internalization of external effects by carbon and related taxes;

- mandatory prior assessment of the environmental effect of RE investments;
- mandatory prior assessment of the economic effect of RE investments, and the effect on utilization and development of other energy sources;
- the development of an RE-friendly trade regime (e.g. cross-border electricity trade involving ‘green electricity’);
- monitoring of the impact of RE projects and lessons learned (failure and success; which policies work, and under what conditions);
- facilitation of technology transfer, while protecting investors’ rights for a certain period;
- investment in research capacity in developing countries, creating an enabling environment that makes RE projects self-sustaining;
- differentiated standards for developing countries, with a further distinction between energy supply to the growing urbanized centres and to remote rural communities not connected to the grid.

Importantly, the development of a Code of Conduct or Code of Best Practices is a mechanism by which to channel the work, experience and expertise of existing initiatives and institutional capacities. Recent examples of multi-stakeholder processes of this kind include the work of the World Commission on Dams, the World Health Organization Commission on Macroeconomics and Health, the ‘Berlin Guidelines on Mining and Sustainable Development’ and the Mining, Minerals and Sustainable Development Project (MMSD).

A code drafted and endorsed by the major stakeholders could serve significant legal functions:

- as justification, under WTO/GATT (General Agreement on Tariffs and Trade) rules, of import restrictions if necessary to protect RE investment;
- as an authoritative argument to protect RE investment if threatened by abrogation of governmental support and protection upon which the investor has relied;
- as a balancing weight when other environmental objectives pursued by single-focus treaties create an impediment to RE investment.

THE OUTCOMES OF RENEWABLES 2004 AS A RESPONSE

In this section we shall briefly discuss how the outcomes of Renewables 2004 address the constraints identified earlier in the institutional landscape.

The political declaration resulting from Renewables 2004 provided the mandate for the creation of a Renewable Energy Policy Network for the 21st Century, Ren21. Its goal is ‘to allow the rapid expansion of renewable energies in

developing and industrial countries by bolstering policy development and decision-making on sub-national, national and international levels'. Ren21 will also play a role in monitoring the 197 actions and commitments contained in the International Action Programme that resulted from Renewables 2004. The political declaration also supports policy analysis, and technological assessments and the sharing of good practice.

The fact that just over a year since Renewables 2004, Ren21 was created, and commitments towards the establishing of a secretariat have been confirmed indicates the international political will to make significant progress for RE. Many of the policy barriers we identified can be addressed by the policy network. The proposed clearinghouse being developed with REEEP will advance information-sharing significantly.

We would like to suggest some ideas for the further evolution of Ren21, recognizing that it may become the international vehicle for sustainable energy. The authors did not participate in the debates among stakeholders in general and within the steering committee in particular. The points below are therefore no criticism of the work accomplished so far, but merely suggestions for possible future developments.

- 1 While an *informal policy network* is an important step to bring together RE stakeholders, we think it should not be the final goal. Ren21 has a secretariat, but there is a strong feeling that it should not create a new institution. While some fatigue in the field of international organizations is perhaps understandable, we believe that a permanent, institutionalized multi-stakeholder organization is required to have an influence on the international political agenda, or on RE commitments that can be monitored and are more than voluntary.

Many partnerships have been created, especially since WSSD, and they often bring together stakeholders in a way that did not happen before. This model could also be expanded to the governing board of a more stable focal point, more than a 'network'. A stable institutional platform as a focal point may better facilitate coordination and cooperation among existing actors.

- 2 Related to the issues of organization is that of *membership*. Ren21 currently proposes a loose network with the option of perhaps formalizing membership at a later stage. The range of stakeholders already in the network is impressive, and Ren21 explicitly aims at bringing together the environment and development communities. The main point we would emphasize in this context is that we feel any network or institution should have as broad as possible a scope in the field of energy. Our original TBP argued for an 'energy for sustainable development' agency. We still believe that mainstreaming of RE may be better achieved if an organization contains stakeholders from outside the RE community, such as traditional energy companies, as well as those from inside it.

- 3 Ren21 plans an impressive range of *activities* to share information and knowledge (cf. also the thematic background papers planned, including a global status report on RE). This will no doubt strengthen the RE community. One important function of any institutional mechanism to strengthen RE could be to carry out what have been termed 'RE audits', as discussed in the preparations for Renewables 2004. This function could be developed further within the context of Ren21. Perhaps the focus should be less on 'making the case for RE', since this case seems to be widely accepted. Rather, countries should be able to find assistance in determining the RE potential of their country, and the different options for sustainable energy more broadly. The Code of Conduct/Code of Best Practices we suggested could fit within Ren21's knowledge exchange activities.
- 4 A *challenge* for Ren21 or any organization in whatever form that promotes sustainable energy is to influence non-energy agendas, and not to operate in isolation. Bringing the development and environment perspectives together is a major step forward (only a few years ago, when the world agreed on indicators to monitor progress towards achieving the Millennium Development Goals, no indicator on RE, such as biomass, was included, despite its major importance for the rural poor). A parallel may be drawn with environmental protection and biodiversity conservation. International commitments and achievements since the Rio Earth Summit in 1992 have been impressive. But today, mainstreaming the environment into sectors that have a major influence, such as trade, still remains a challenge.

CONCLUSION

The promotion of RE requires cohesion, focus, coordination and, ultimately, critical mass. Traditional models of developing international policy and organizational frameworks through exclusive intergovernmental processes would not provide an effective response to this need. A multi-stakeholder approach is far more likely to harness the significant potential of non-state actors to promote RE in partnership with governments by drawing on their expertise, resources and capacity to influence and respond to consumer choice. The effectiveness of governments in establishing policy and regulatory frameworks for the promotion of RE will in large part depend on their capacity to mobilize the potential of researchers, investors and consumers.

While the future role of RE depends on the research and development of technological options, the economic, institutional and development policy frameworks will determine whether RE can establish itself as a viable source of complementary/alternative energy. The establishment of a new multi-stakeholder platform and the codification of an emerging consensus on RE are considered two pathways for strengthening the institutional framework for RE at

an international level. The logic of this approach points ultimately towards the need for a global institutional platform for sustainable energy development.

The creation of a multi-stakeholder network after Renewables 2004 is an important step towards the promotion and mainstreaming of RE. We have made suggestions for the future development of Ren21, in terms of both organization and substantive activities. The current international momentum for RE promises long-overdue developments that will depend on appropriate institutional support. We believe that an informal multi-stakeholder network is an essential first step, and could evolve into a more permanent institution.

NOTE

The authors wish to thank Gavin Longmuir for comments.