

The International Renewable Energy Agency: A Global Voice for the Renewable Energy Era?

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The International Renewable Energy Agency¹ held the first session of its Assembly as a fully-fledged international organisation in April 2011. This article aims to introduce the Agency and provide a basis for ongoing academic comment, discussion and analysis as the Agency establishes itself and progresses its substantive work. The paper will briefly outline the origins of the Agency, its institutional arrangements and key elements of its Statute, and consider the first budget and work programme. The paper will note some points of interest that warrant further discussion before outlining the Agency's activities to date and assessing the potential contribution the Agency can make to the development of renewables.

I. Introduction

The world faces unprecedented energy challenges. The threat posed by global warming necessitates the decarbonisation of our energy system, yet an explosion in population growth means ever-rising demand, strains on supply, and rising energy prices. Energy poverty and disparity are critical issues and over 80 % of all energy used worldwide comes from non-renewable sources,² which are unevenly distributed and quickly depleting. The Intergovernmental Panel on Climate Change recently reaffirmed the role of renewable energy in confronting

these challenges, stating that renewables have a “large potential to mitigate climate change” and can “contribute to social and economic development, energy access, energy security, and reduce negative impacts on the environment and health”.³

The International Renewable Energy Agency was established in January 2009.⁴ IRENA has attracted widespread support and agreement infrequently seen on the international stage: to date 149 states have signed the Statute of the Agency⁵ and 85 states have ratified the Treaty.⁶ In April 2011, IRENA held the first session of its Assembly. This is an important milestone in the Agency's development, as it signifies the end of its establishment phase, its birth as an international organisation, and the beginning of its substantive work towards the fulfilment of its mandate.

This paper will first outline the origins and antecedents of the Agency and its institutional arrangements. Secondly, the Statute and aims of IRENA will be set out, followed by a detailed summary of the current work programme. This paper will then identify some key issues of interest, focusing on the Agency's relationship with the United Nations (UN), International Energy Agency (IEA) and other bodies, and the Agency's strategic focus. The Agency's activities to date will be outlined and this paper considers whether the Agency is heading in the right direction in terms of navigating the challenges it faces. This paper will then assess the

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1 Referred to as IRENA or “the Agency” in this article.

2 IRENA, “Fact Sheet: 1”, May 2011, available on the Internet at <<http://www.irena.org/menu/index.aspx?mnu=cat&PriMenuID=47&CatID=73>> (last accessed on 20 December 2011).

3 Ottmar Edenhofer et al., *Special Report Renewable Energy Sources*, Summary for Policy Makers (Cambridge: Cambridge University Press, 2011).

4 IRENA Founding Conference (Bonn: 26 January 2009).

5 Statute of the International Renewable Energy Agency (IRENA), Bonn, 26 January 2009, in force 8 July 2009, Doc. IRENA/FC/Statute, Art. IX.C.

6 For a list of current numbers, see IRENA, “Updates on Ratification & Signatories”, available on the Internet at <<http://www.irena.org/menu/index.aspx?mnu=cat&PriMenuID=46&CatID=67>> (last accessed on 25 June 2011).

potential contribution of IRENA and offer some closing remarks. This paper concludes that, while IRENA faces significant challenges, it has significant support at an opportune moment and has the potential to become the global voice of the renewable energy era.

II. Antecedents to IRENA

While the establishment of IRENA comes at a moment of great interest and optimism surrounding renewable energy, due to the challenges of climate change and sustainable development, earlier interest within the international community was borne of the oil crisis of the 1970s and the resulting concern over uncertainty of fuel supply and future depletion of fossil fuels.⁷

The first significant international move toward the creation of an international body for renewable energy was the UN Conference of New and Renewable Sources of Energy, held in Nairobi, Kenya, in August 1981 (Nairobi Conference). The Nairobi Programme focused on energy assessment and planning, research and development, transfer, adaptation and application of mature technologies, as well as information flows, education and training.⁸ The Nairobi Conference recommended that a body be established to implement and monitor the Nairobi Programme.⁹

In light of the Nairobi Conference, the UN General Assembly (UNGA) stressed that there “should be an intergovernmental body of the United Nations specifically concerned with new and

renewable sources of energy”.¹⁰ Later that year the UNGA established the Committee on the Development and Utilization of New and Renewable Sources of Energy (the Committee).¹¹

Despite initial enthusiasm, the Committee noted that the ten years following the Nairobi Conference were “essentially lost” because “the political resolve expressed in the Nairobi Programme of Action was not supported” by more concrete action such as targets, financial commitments, and institutional support.¹² This collective apathy was compounded by the continuation of national policies that inhibited the development of renewable energy sources.¹³ Given these shortcomings, at its sixth session in February 1992, the Committee stated, “a strong international institutional arrangement is needed to ... give renewable energy necessary visibility and weight” and recommended the creation of an international renewable energy agency.¹⁴

At the same time as the Committee was faltering, the seminal UN Conference of Environment and Development took place, in June 1992, and Agenda 21 was adopted.¹⁵ Chapter 9 of Agenda 21 noted the importance of sustainable energy systems, in particular new and renewable energy sources. Despite this recognition, and the Committee’s call for a stronger institutional arrangement, the Committee was subsequently subsumed by the Committee on New and Renewable Sources of Energy and on Energy for Development, which first met in 1994,¹⁶ itself subsumed by the Committee on Energy and Natural Resources for Development in 1998.¹⁷ This left no international body solely responsible for, or focused on, renewable energy.

7 Sixth session of the Committee on Development and Utilization of New and Renewable Sources of Energy, Implementation of the Nairobi Programme of Action for the Development and Utilization of New and Renewable Sources of Energy: Contribution of the United Nations Conference on Environment and Development, Solar energy: a strategy in support of environment and development, UN Doc. A/AC.218/1992/5/Rev.1, 13 February 1992, at p. 7.

8 Resolution 36/193, United Nations Conference on New and Renewable Sources of Energy, UN Doc. A/RES/36/193, 17 December 1981.

9 See IRENA, “History of IRENA”, available on the Internet at <<http://www.irena.org/menu/index.aspx?mnu=cat&PriMenuID=13&CatID=30>> (last accessed on 20 December 2011).

10 Resolution 36/193, *supra* note 8.

11 Resolution 37/250, Immediate Implementation of the Nairobi Programme of Action for the Development and Utilization of

New and Renewable Sources of Energy, UN Doc. A/RES/37/250, 21 December 1982.

12 Sixth session of the Committee on Development and Utilization of New and Renewable Sources of Energy, *supra* note 7, at p. 8.

13 *Ibid.*

14 *Ibid.*, at p. 14.

15 See UN Department of Economic and Social Affairs Division for Sustainable Development, “Agenda 21”, 14 June 1992, available on the Internet at <<http://www.un.org/esa/dsd/agenda21>> (last accessed on 20 December 2011).

16 See Report of the First Session of the Committee on New and Renewable Sources of Energy and on Energy for Development, UN Doc. E/1994/25, 23 February 1996.

17 See Economic and Social Council Resolution 46.1998, Further measures for the restructuring and revitalization of the United Nations in the economic, social and related fields, F UN Doc. E/RES/1998/46, 31 July 1998.

1. Recent Developments

Support for renewable energy has since seen a resurgence, as reflected in a number of international decisions. In April 2001, the UN Commission on Sustainable Development adopted a decision on “Energy for Sustainable Development”, and in 2002 the World Summit on Sustainable Development adopted the Johannesburg Plan of Implementation, with a number of chapters addressing renewable energy.¹⁸ The Renewable Energy Network for the 21st Century was established in 2004, signalling movement toward the establishment of an overarching renewable energy agency. In 2005 the Beijing International Renewable Energy Conference emphasised the need for international cooperation, and the 2008 Washington International Renewable Energy Conference (WIREC) resulted in the Washington International Action Programme, which comprised over 100 pledges from countries and organizations.

Importantly for IRENA, WIREC also witnessed the first formal proposal for an international renewable energy agency.¹⁹ At a Plenary Session, Hermann Scheer, then General Chairman of the World Council for Renewable Energy, addressed delegates to the Ministerial Meeting, detailing the

German proposal for IRENA and inviting other states to become part of the establishment process.²⁰

III. Establishment of IRENA

1. First Preparatory Conference and Workshops

In April 2008, little more than a month after WIREC, the first meeting of the Preparatory Conference for the Foundation of IRENA (First Preparatory Conference) was convened in Berlin. The First Preparatory Conference was attended by representatives of 60 countries, expressing broad support for the establishment of IRENA.²¹ Following the First Preparatory Conference, two preparatory workshops were held.²² At the first, participants expressed their desire for IRENA to be established quickly and the need to prevent IRENA becoming a funding agency.²³ The second developed the Statute, financial mechanisms and organs of the proposed agency.²⁴

2. Final Preparatory Conference

The second and final Preparatory Conference was held in October 2008. Discussions regarding the Statute were finalised and a Preparatory Commission was founded as an interim body to lead the Agency between the establishment of IRENA and the first session of the Assembly (First Assembly). Participants, in line with prior discussions, decided that “emphasis will be placed on providing, upon request, policy advice for national governments, facilitating technology transfer and capacity building”.²⁵

3. Founding Conference and Preparatory Commission

The Founding Conference took place in Bonn in January 2009. It was attended by 124 countries, and the European Union (EU).²⁶ 75 delegations signed the Statute.²⁷

The Founding Conference established the Preparatory Commission, whose role was to prepare for the swift implementation of the Statute,

¹⁸ Annex to the Report of the World Summit on Sustainable Development, Johannesburg, South Africa, Plan of Implementation of the World Summit on Sustainable Development, UN Doc. A/CONF.199/20, 4 September 2002, at chapters II–III.

¹⁹ Douglas Bushey *et al.*, “WIREC 2008 Ministerial Bulletin”, 95(6) *IISD Reporting Services* (2008), at p. 2.

²⁰ *Ibid.*

²¹ Alice Bisiaux *et al.*, “Fifth Session of the Preparatory Commission and First Session of the Assembly of the International Renewable Energy Agency: 3–5 April 2001”, 30(1) *Earth Negotiations Bulletin* (2011), at p. 1.

²² IRENA, “Workshops I+II”, available on the Internet at <<http://www.irena.org/menu/index.aspx?mnu=Subcat&PriMenuID=13&CatID=30&SubcatID=56>> (last accessed on 20 December 2011).

²³ *Ibid.*

²⁴ *Ibid.*

²⁵ IRENA website, “Final Preparatory Conference”, available on the Internet at <<http://www.irena.org/menu/index.aspx?mnu=Subcat&PriMenuID=13&CatID=30&SubcatID=55>> (last accessed on 20 December 2011).

²⁶ Report of the Conference on the Establishment of the International Renewable Energy Agency, Doc. IRENA/FC/CR, 26 January 2009, at Annex 1.

²⁷ *Ibid.*, at Annex 10.

ensure an early presence of the Agency, and facilitate the early implementation of IRENA's objectives.²⁸ The Preparatory Commission was directed to prepare: a provisional agenda for the First Assembly; draft rules of procedure for the Assembly and Council; a budget and work programme; and other necessary institutional documentation.²⁹ The Preparatory Commission met a total of five times prior to the First Assembly and was instrumental in designing the institutional structure of the Agency, which will now be discussed.³⁰

IV. Institutional Structure

1. Location

In deciding on the location of the Agency, a range of political considerations were taken into account,³¹ with Abu Dhabi ultimately chosen.³² The Agency will eventually be located in Masdar City, the world's first renewable energy-powered, low carbon city.³³ Masdar City aims to be an "emerging hub" for the renewable energy industry and a "magnet for talent, financial capital and entrepreneurship".³⁴

2. Organs

Article VIII of the Statute establishes the three principal organs of the Agency: the Assembly; the Council; and the Secretariat. Additional subsidiary organs may be established by the Assembly and the Council, subject to Assembly approval.

a. The Assembly

The Assembly is the supreme organ of IRENA according to Article IX. The Assembly is composed of one representative from each member state³⁵ and meets once a year.³⁶

Responsibilities under Article IX.G must be carried out by consensus of the members present, and include: electing the members of the Council; adopting the budget and work programme; taking decisions relating to financial rules and policies of the Agency; approving amendments to the Statute; and deciding on the establishment and mandate of subsidiary bodies. Activities under Article IX.H must also be approved by consensus, but if consensus cannot be reached it can be taken to have been reached where no more than two members object. These activities include: deciding on applications for membership; approving rules of procedure; adopting the annual report and other reports; approving the conclusion of agreements on any matters within the scope of the Statute; and deciding on additional projects in the case of disagreement amongst members. Article IX.I requires consensus, or alternatively a two-thirds majority vote, to designate the seat of the Agency and the Director-General of the Secretariat.

In addition to these delineated functions, the Assembly may discuss any matter within the scope of the Statute³⁷ and may take decisions and make recommendations to organs of the Agency, or to members, upon their request.³⁸ The Assembly is also able to propose to the Council matters for consideration and request reports from the Secretariat.³⁹

28 Resolution 1, Resolution on Establishing a Preparatory Commission for the International Renewable Energy Agency, Doc. IRENA/DC/res.1, 26 January 2009, at Art. 1.

29 *Ibid.*, Art. 10.

30 See "History of IRENA", *supra* note 9. For a detailed summary of the outcomes of each session of the Preparatory Commission, see Alice Bisiaux *et al.*, "Fifth Session of the Preparatory Commission and First Session of the Assembly of the International Renewable Energy Agency", *supra* note 21.

31 Leaked diplomatic documents provide insight on these considerations. See Terry Macalister, "WikiLeaks shines light on shady backroom deals that gave renewables HQ to Abu Dhabi", *Recharge News*, 10 December 2010, available on the Internet at <http://www.rechargenews.com/business_area/politics/article/239002.ece> (last accessed on 20 December 2011).

32 Draft decision regarding the work programme and Budget for 2011, Doc. IRENA A/1/DC/L.11, 4 April 2011.

33 Masdar City, "The Global Centre of Future Energy", available on the Internet at <http://www.masdarcity.ae/userfiles/files/brochures/7714_masdar_city_ad.pdf> (last accessed on 20 December 2011), at p. 5.

34 *Ibid.*, at p. 13.

35 Statute of the International Renewable Energy Agency, *supra* note 5.

36 *Ibid.*, Art. IX.B.

37 *Ibid.*, Art. IX.2.

38 *Ibid.*, Art. IX.3.

39 *Ibid.*, Art. IX.4.

b. The Council

The Council is accountable to the Assembly.⁴⁰ It is composed of 21 representatives of the members,⁴¹ elected on a rotating basis, and meets twice a year.⁴²

Article X.F of the Statute enumerates the following functions of the Council: facilitating cooperation amongst members; considering and submitting a draft work programme and budget to the Assembly; approving arrangements for the sessions of the Assembly, including preparing the draft agenda; considering and submitting the draft annual report and other reports prepared by the Secretariat; preparation of reports requested by the Assembly; concluding agreements with states and international organisations on behalf of the Agency (subject to prior Assembly approval); substantiating the work programme; referring matters to the Assembly for consideration; and establishing subsidiary organs.

c. The Secretariat

The role of the Secretariat is to assist the Assembly and Council, and their subsidiary organs.⁴³ Its key role is the implementation of the Agency's work programme and decisions.⁴⁴ The Secretariat comprises the Director-General, who is the chief administrative officer, appointed for a once-renewable term of four years, and other staff as required.⁴⁵

⁴⁰ *Ibid.*, Art. X.E.

⁴¹ *Ibid.*, Art. X.

⁴² *Ibid.*, Art. X.B.

⁴³ *Ibid.*, Art. XI.A.

⁴⁴ The Statute, *supra* note 5, Art. XI.E.2.

⁴⁵ *Ibid.*, Art. XI.B.

⁴⁶ *Ibid.*, Art. IV.C.2.

⁴⁷ Alice Bisiaux *et al.*, "Summary of the Fifth Preparatory Commission and First Assembly of the International Renewable Energy Agency: 3–5 April 2001", 30(4) *Earth Negotiations Bulletin* (2011), at p. 7.

⁴⁸ IRENA, "Boost to Renewable Energy: International Renewable Energy Agency opens Innovation and Technology Centre in Bonn" (7 October 2011), available on the internet at <http://www.irena.org/News/Description.aspx?NType=NWS&PriMenuID=16&catid=84&mnu=cat&News_ID=145> (last accessed on 25 November 2011).

⁴⁹ *Ibid.*, at p. 2.

⁵⁰ The Statute specifically mentions the following forms of renewable energy: bioenergy; geothermal energy; hydropower; ocean energy (including, *inter alia*, tidal, wave and ocean thermal energy); solar energy; and wind energy. *Ibid.*, Art. III.

Article XI.E of the Statute lists the following as the responsibility of the Secretariat: preparation and submission to the Council of the draft work programme and budget, annual report, and other reports as requested; provision of administrative and technical support to the Assembly and Council; facilitation of communication between the Agency and its members; and circulation of policy advice after it is given to a member.⁴⁶

d. Other Bodies

In addition to the three core bodies, the Agency has decided to establish a Governance and Legal Committee, a Policy and Strategy Committee and a Committee on Finance.⁴⁷ IRENA has also decided to establish the IRENA Innovation and Technology Centre (IITC), which is located in Bonn and was opened in October 2011,⁴⁸ and a liaison office for cooperation with other renewable energy organisations.⁴⁹

V. The IRENA Statute

1. Preamble and Objective

The preamble of the IRENA Statute states that the parties wish to promote the widespread adoption of renewable energy with a view to sustainable development, job security, energy price resilience, reducing greenhouse gas emissions, transitioning to a low-carbon economy and improving human health. The preamble also notes the desire of the parties to establish an international agency, while also working closely with other organisations, and the potential of renewable energy to assist developing, isolated and remote regions in particular. These points are worthy of further discussion and will be considered in more detail later in the paper.

The sole stated objective of the Agency, according to Article II of the Statute, is to "promote the widespread and increased adoption and the sustainable use of all forms of renewable energy".⁵⁰

2. Activities

In pursuit of its objective, the Statute states that IRENA will be a "centre of excellence for renewable energy technology ... a facilitator and catalyst, pro-

viding experience for practical applications and policies, offering support ... and helping countries benefit from the efficient development and transfer of knowledge and technology”.⁵¹ The Statute states that IRENA will perform nine activities,⁵² which can be distilled into five broad categories as follows: (1) analysis and monitoring of renewable energy policies;⁵³ (2) interaction with other organisations and networks;⁵⁴ (3) provision of information and advice;⁵⁵ (4) knowledge and technology transfer and capacity building;⁵⁶ and (5) encouraging research.⁵⁷

These activities will be performed on the basis of an annual work programme.⁵⁸ IRENA may also initiate additional projects, subject to consultation with members and availability of resources.⁵⁹

3. Membership and Observers

Membership of IRENA is open to members of the UN and “regional intergovernmental economic integration organizations”.⁶⁰ The Statute allows observer status to be granted to intergovernmental and non-governmental organisations in the renewable energy field,⁶¹ as well as signatories that have not yet ratified the Statute and regional economic integration organisations whose applications are still pending.⁶² Observers may participate in the public sessions of the Agency, but cannot vote.⁶³

4. Budget

The Agency is financed through a combination of mandatory member contributions, voluntary contributions, and “other possible sources”, for which no further detail is given.⁶⁴ A draft budget is prepared by the Secretariat and submitted to the Council for examination. The Council can then forward it to the Assembly recommending approval, or return it to the Secretariat for review and re-submission.⁶⁵

VI. First Assembly

The first session of the Assembly of IRENA (First Assembly) was held in Abu Dhabi from 4-5 April 2011. The First Assembly approved IRENA's first budget and work programme, indicating that the

Agency is entering a new stage in its development as an international organisation.

VII. First Budget

The core budget for the Agency in its first year is US\$13.26 million.⁶⁶ The budget is apportioned between the sub-programmes discussed below. In addition to the core budget, the UAE is to provide up to US\$2.9 million each for operations and research, and US\$1.6 for workshops and conferences.⁶⁷ Germany has also made a voluntary contribution of up to US\$3.1 million for the operation of the IITC.⁶⁸

VIII. First Work Programme

The first work programme⁶⁹ sets out the work to be undertaken by the Agency in its first year of operation. Many of the activities are the first steps toward long term projects and programmes of the Agency. The first work programme divides the activities of the Agency into three sub-programmes.

⁵¹ *Ibid.*, Art. IV A.

⁵² *Ibid.*, Art. IV A.1.

⁵³ *Ibid.*, Art. IV A.1.a.

⁵⁴ *Ibid.*, Art. IV A.1.b.

⁵⁵ *Ibid.*, Arts. IV A.1.c, f and h; Art. IV A.2.

⁵⁶ *Ibid.*, Arts. IV A.1. d and e.

⁵⁷ *Ibid.*, Art. IV A.1.g.

⁵⁸ *Ibid.*, Art. V.A. This is prepared by the Secretariat, considered by the Council, and adopted by the Assembly.

⁵⁹ *Ibid.*, Art. V.B.

⁶⁰ An organisation “constituted by sovereign states, at least one of which is a Member of the Agency, and to which its members have transferred competence in at least one of the matters within the purview of the Agency” (*Ibid.*, Art. VI.A). For example, the European Union has become a member.

⁶¹ *Ibid.*, Art. VII.A.1.

⁶² *Ibid.*, Arts.VII.A.2 and 3.

⁶³ *Ibid.*, Art. VII.B.

⁶⁴ *Ibid.*, Art. XII.

⁶⁵ *Ibid.*, Art. XII.B.

⁶⁶ Draft decision regarding the work programme and Budget for 2011, Doc. A/1/DC/L.8, 4 April 2011.

⁶⁷ *Ibid.*, at p. 2.

⁶⁸ *Ibid.*

⁶⁹ Draft decision regarding the work programme, *supra* note 66.

These are: knowledge management and technology cooperation; policy advisory services and capacity building; and innovation and technology. Each sub-programme is described in more detail below.

The Assembly also urged the Council and Director-General to prepare a strategic framework for 2012–2015 to be considered at the second session of the Assembly. This framework will clearly define “vision, strategic direction, objectives, and activities”.⁷⁰ The Assembly also requested that the Council and Director-General expand upon the work programme and begin early development of the 2012 work programme and budget.⁷¹

1. Sub-Programme 1: Knowledge Management and Technology Cooperation

The first sub-programme aims to facilitate the transition to an increased role for renewable energy. This sub-programme aims to “create processes and systems that facilitate knowledge sharing across global and regional networks of governmental and non-governmental stakeholders”.⁷² The projects proposed are: the systematisation of knowledge on renewable energy; development of regional collaboration and platforms for engaging with stakeholders and technical experts; and encouragement of North-South and South-South technology cooperation.

The systematisation of knowledge is conceived as a collation and consolidation exercise, involving the identification of available knowledge resources and gaps therein, conducting targeted studies on the mapping of global resource potential,⁷³ and producing resource assessments.⁷⁴

The promotion of regional collaboration and stakeholder engagement largely relates to the initial establishment of relationships with relevant regional forums⁷⁵ and the building of a network of stakeholders, such as industry, civil society organisations and experts.⁷⁶ This is understandably a pri-

ority for a fledgling organisation, as many stakeholders will not yet be aware of IRENA’s existence, or the nature of its mandate. Establishing links with stakeholders early on ensures that IRENA can later draw on feedback, as well as benefit from other expertise and capacities. For example, the Agency foresees that civil society organisations may be able to help with outreach efforts.⁷⁷

The sub-programme also includes the development of a process for consulting with relevant regional bodies and stakeholders to develop Renewable Energy Readiness Assessments, starting with Africa and the Pacific, which will assess policy and institutional structures and identify opportunities for implementing effective renewable energy policy.

2. Sub-Programme 2: Policy Advisory Services and Capacity Building

The policy advisory and capacity building sub-programme seeks to implement activities that were identified by many participants in the establishment of IRENA as a key priority, and set out as such in the Statute. The sub-programme will “provide analysis of the latest trends and developments in renewable energy policy... and support its members with tailored advice”.⁷⁸ The initial projects planned are: fostering policies that enable renewable energy development; improving understanding of the financing and investment possibilities for renewables; and enhancing knowledge of effective responses to human resources gaps in the transition to renewable energy.⁷⁹

The focus on fostering enabling policies reflects a belief that “[w]ell designed incentives and support policies exert substantial influence on markets, investment and research and development of renewable energy”.⁸⁰ IRENA plans to consult with relevant policy support organisations to identify priorities and forge relationships that will assist in

⁷⁰ Draft decision regarding the work programme, *supra* note 66, at p. 2.

⁷¹ *Ibid.*

⁷² *Ibid.*, at p. 18.

⁷³ *Ibid.*

⁷⁴ *Ibid.*, at p. 19.

⁷⁵ *Ibid.*

⁷⁶ *Ibid.*, at p. 20.

⁷⁷ *Ibid.*, at p. 19.

⁷⁸ *Ibid.*, at p. 24.

⁷⁹ *Ibid.*

⁸⁰ *Ibid.*

the future dissemination of policy advice to members, and to consult with the IEA in order to establish a joint IEA/IRENA renewable energy policy database, extending the current IEA database to developing countries. IRENA will also undertake two analyses: one on best practice in renewable energy policies and another on the employment impacts of renewable energy.⁸¹

Regarding improving understanding of financing possibilities, IRENA will analyse financial flows and mechanisms for renewable energy in developing countries and identify information gaps and best practices. The Agency will also be working to facilitate the scaling-up of the renewables component of the UN Framework Convention on Climate Change Green Climate Fund.

Finally, as to the human resources component of the policy advisory services and capacity building sub-programme, IRENA will begin to develop analytical processes to assist governments in identifying capacity gaps and addressing these gaps. This will involve reviewing best practices on capacity building and collating existing information on existing capacity building measures, and drawing on existing databases to design a Renewable Energy Learning Portal as a common platform for the exchange of knowledge between renewable energy and education experts. IRENA will formulate its overarching approach to supporting capacity building and facilitating the increased availability of resources for capacity building.⁸²

3. Sub-Programme 3: Innovation and Technology

The third sub-programme is designed to “provide governments with the means for an accelerated renewable energy technology uptake tailored to their specific needs.”⁸³ The first year of operation will see: the establishment a framework for technology policy support for governments; an increased understanding of cost reduction potential; and wider use of standards to accelerate uptake.⁸⁴

In order to better assist governments that request assistance with planning for more effective renewable energy technology and innovation strategies, IRENA will collect and categorise scenarios for such strategies, starting with a regional focus on Africa. Preliminary data collection will also begin in anticipation of a regional focus on the

Pacific in 2012. IRENA will assess end-use technology options, conduct a patent analysis, develop a technology database and technology fact sheets focused on best practice renewable energy technology solutions for different end uses, and draft technology road maps to identify prospects and barriers for renewable energy in particular areas.⁸⁵ Again, the Agency plans to cooperate with numerous organisations, including the World Intellectual Property Organisation.⁸⁶

To better understand the cost of renewables and potential for cost reductions through technology development, IRENA will prepare an overview of the cost of renewable energy technologies. This information will be analysed according to a standard methodology and used to help governments set feed-in tariffs and assess the cost effectiveness of different technologies.⁸⁷ The Agency will also promote the use of standards, test procedures and good practices for renewable energy technologies as these are “essential to creat[ing] well-functioning markets”.⁸⁸

IX. Challenges for IRENA

In this section, some of the key challenges that IRENA faces will be discussed. This will provide some points of interest and focus that will be relevant as IRENA seeks to establish itself as the peak body for renewable energy in the international arena.

1. Overlapping Mandates

There is some concern over the extent to which the Agency’s mandate will overlap with those of other organisations in the field. This issue is one that concerned both the US and the UK, who were worried

⁸¹ *Ibid.*, at p. 25.

⁸² *Ibid.*, at p. 26.

⁸³ *Ibid.*, at p. 29.

⁸⁴ *Ibid.*

⁸⁵ *Ibid.*, at p. 31.

⁸⁶ *Ibid.*, at p. 30.

⁸⁷ *Ibid.*, at p. 31.

⁸⁸ *Ibid.*

that IRENA “could duplicate work of other multilateral organizations”.⁸⁹

Two examples readily come to mind. Firstly, the Renewable Energy and Energy Efficiency Partnership (REEEP) “works to reduce the barriers limiting the uptake of renewable energy and energy efficiency technologies, with a primary focus on emerging markets and developing countries” and focuses on assisting governments to create renewable energy regulatory and policy frameworks and promote innovative financing models.⁹⁰ Secondly, the Renewable Energy Policy Network for the 21st Century (REN-21) “convenes international multi-stakeholder leaders to enable a rapid global transition to renewable energy”.⁹¹ The objectives of these organisations clearly have much in common with those of IRENA.

In addition, there are a number of UN entities working on renewable energy, such as the Environment and Development Programs, UN-Energy, and the Industrial Development Organization, as well as other organisations, such as the IEA, whose relationship with IRENA is discussed further below. Given the number of relevant organisations, it is clear that IRENA enters a cluttered and piecemeal institutional landscape.

While IRENA will have to find its place in this institutional landscape, there are opportunities available and gaps to fill. For example, IEA membership is only open to OECD countries, whereas IRENA is a truly international organisation. REEEP is an organisation focussed on on-the-ground implementation of renewable energy projects, whereas IRENA will not be involved directly in such proj-

ects. IRENA may be able to augment existing IEA projects. For example, the first work programme notes that the Agency will build upon existing IEA data to develop a more extensive renewable energy statistics database.⁹²

Given the foregoing, a key challenge for IRENA in its early years as an international organisation will be establishing itself in the field, discerning the gaps in the institutional landscape, and distilling the Agency’s core strategic priorities. The Statute recognises this and warns against the “unnecessary duplication of work”,⁹³ and IRENA has acknowledged that it “enters an institutional universe already populated by a plethora of research, advocacy, sectoral, regional and issue based institutions” and that it must “develop and position itself as an inclusive global platform” within this space.⁹⁴

How the Agency approaches this task will be crucial. It is submitted that IRENA should firstly conduct a detailed analysis of the organisations already operating in the renewable energy field, and particularly those that focus on the same areas as the Work Programme. This will help to identify what is already being done and what IRENA can contribute. Secondly, IRENA should seek to establish relationships with those organisations that operate in the same area in order to collaborate on projects and ensure that work is not duplicated.

Given the number of renewable energy institutions that IRENA overlaps with, IRENA’s international and near-universal nature is likely to be its key feature. While its broad mandate means that it overlaps in principle with other organisations, it also means that IRENA is well placed to fill institutional gaps, implement projects jointly with existing organisations with relevant expertise, collate and consolidate existing efforts in the field, and ultimately act as the peak representative body for renewables internationally. The flexibility afforded by IRENA’s broad mandate can be viewed as a strength, as well as one of its greatest challenges.

Encouragingly, IRENA has quickly moved to cement relationships with key renewable energy organisations and, as the discussion of current activities will highlight, it has begun to develop projects that fill gaps in the renewable energy space or augment existing projects. IRENA and REEEP have signed a Memorandum of Understanding (MoU) that defines a “general framework for cooperation within which both organisations can explore and implement concrete activities over the

89 “UK Plans to Join the International Renewable Energy Agency, Working on Final Steps”, *The Telegraph*, 4 February 2011, available on the Internet at <<http://www.telegraph.co.uk/news/wikileaks-files/london-wikileaks/8305277/UK-PLANS-TO-JOIN-THE-INTERNATIONAL-RENEWABLE-ENERGY-AGENCY-WORKING-ON-FINAL-STEPS.html>> (last accessed on 20 December 2011).

90 REEEP, “About REEEP”, available on the Internet at <<http://www.reEEP.org/48/about-reeep.htm>> (last accessed on 20 December 2011).

91 REN21, “About REN21”, available on the Internet at <<http://www.ren21.net/AboutREN21/tabid/5017/Default.aspx>> (last accessed on 20 December 2011).

92 *Ibid.*, at p. 18.

93 The Statute, *supra* note 5, Art. IV.B.3.

94 Draft decision regarding the work programme, *supra* note 66, at p. 5.

next three years”.⁹⁵ This suggests that the organisations will collaborate in order to implement projects that combine the expertise and resources of both organisations. In particular, REEEP’s strong track record of ground-level interventions in renewable energy can be enhanced by IRENA’s policy expertise, while IRENA can benefit from REEEP’s existing wide memberships.

2. IRENA and the UN

It is important to note that IRENA is not a UN body. In order to avoid delay in establishing the Agency, First Preparatory Conference deliberately chose not to use the UN as a forum for IRENA’s establishment.⁹⁶

Nonetheless, the Statute does make numerous references to the UN and IRENA’s relationship therewith. Article IV.B.1 states that IRENA will “act in accordance with the purposes and principles of the United Nations to promote peace and international cooperation, and in conformity with policies of the United Nations furthering sustainable development”. IRENA also follows the UN in a number of institutional arrangements: membership is open to members of the UN; budget contributions are based on the scale of UN budget contributions: the Statute borrows the mechanism for settlement of disputes from the UN Charter;⁹⁷ and IRENA has committed to the “progressive integration of official UN languages”.⁹⁸

The inclusion of UN elements in the IRENA Statute may simply represent the desire of the parties to establish the Agency quickly, as the utilisation of well-established and widely agreed facets of the UN system avoided the considerable time and cost of re-negotiating these elements of the Statute.

However, there was much informal discussion and speculation about the relationship of the Agency with the UN amongst delegates at the First Assembly. The appointment of the first Director-General of the Agency, a “well-respected and well-connected UN insider”,⁹⁹ drew discussion about the “UN-isation” of IRENA. While one participant mused that this could be the “first sign of IRENA leaning towards joining the UN family”, another aptly noted that it would be almost impossible to establish an international organisation with near-universal participation without inviting the comparison to a UN body.¹⁰⁰ Further fuelling speculation, the colour of the logo of IRENA was changed to a shade of blue strikingly similar to that of the UN logo.¹⁰¹ Indeed, one Antiguan newspaper has already mistaken the Agency for a UN body.¹⁰²

Numerous heads of UN agencies attended the First Assembly. UN-Energy expressed its intention to act as a link between IRENA and the UN, and the UN Environmental and Development Programmes offered to disseminate IRENA’s policy advice and share expertise and knowledge.¹⁰³ The UN Secretary-General noted the importance of IRENA given that 2012 will be the UN’s “International Year of Sustainable Energy for All”.¹⁰⁴ These interactions suggest that, even if IRENA does not become a UN agency, it will closely cooperate with UN agencies. Given the potential overlap between IRENA and these UN organisations, the offer of cooperation and collaboration is welcome, as it increases the probability that IRENA’s work will be additional to what is already being done.

While the Statute does not provide for the Agency to become a UN body, the numerous references and similarities to a UN body, the discussion of such a transition occurring so early on in the Agency’s life, and the close cooperation offered by

95 IRENA, “IRENA and REEEP agree on a partnership: Marianne Osterkorn and Adnan Amin sign a Memorandum of Understanding” (25 August 2011), available on the Internet at <http://www.irena.org/News/Description.aspx?NType=NWS&PriMenuID=16&mnu=Pri&News_ID=131> (last accessed on 20 December 2011).

96 Alice Bisiaux *et al.*, “Summary of the Fifth Preparatory Commission and First Assembly of the International Renewable Energy Agency”, *supra* note 47, at p. 9.

97 The Statute, *supra* note 5, Art. XVI.A.

98 Alice Bisiaux *et al.*, “Summary of the Fifth Preparatory Commission and First Assembly of the International Renewable Energy Agency”, *supra* note 47, at p. 7.

99 *Ibid.*, at p. 9.

100 *Ibid.*

101 *Ibid.*, at p. 4.

102 Observer News, “Antiguan heads UN renewable energy committee”, *Antigua Observer*, 14 June 2011, available on the Internet at <<http://www.antiguaobserver.com/?p=59980>> (last accessed on 20 December 2011). While a small Antiguan publication is, of course, not a representative sample, it is illustrative of how passive observers could easily mistake IRENA for a UN body.

103 Alice Bisiaux *et al.*, “Summary of the Fifth Preparatory Commission and First Assembly of the International Renewable Energy Agency”, *supra* note 47, at p. 6.

104 *Ibid.*, at p. 5.

UN agencies suggest that this is an area to be keenly observed as the Agency develops.

The Agency would be well advised to make clear its position in relation to the UN in order to avoid confusion for observers, but also, more importantly, for the Agency itself. If the Agency was in part established so as to avoid the perceived bureaucratic nature of the UN, then ensuring that the processes of the Agency do not come to replicate those processes is important. However, if the Agency wished to circumvent those processes in the short-term in order to ensure rapid establishment, with the eventual aim of becoming more integrated with the UN, the Agency may wish to mould its workings around the UN and seek close cooperation with UN agencies. Indeed, if the main contribution of IRENA is that it will be the main representative of renewable energy at the international level, as is suggested in the analysis below, it may be that an eventual move into the UN family could increase IRENA's profile and further improve collaboration across organisations.

3. IRENA and the IEA

The founders of IRENA intended the Agency to be an “institutional counterbalance to the International Energy Agency (IEA) which has been accused of not doing enough to promote alternative energy”.¹⁰⁵

On the one hand, it is clear that the IEA has increased its focus on renewables in recent years. The IEA acknowledges the growing importance of renewables and works on analysis of renewable energy technologies and research, development and demonstration, as well as, more recently, system

integration issues and gathering of statistical data.¹⁰⁶

On the other hand, the primary driver of concern regarding the IEA seems to be that only 2 % of the IEA's budget is used for renewable energy activities.¹⁰⁷ One of the candidates for the position of Director General at IRENA, Hans Jürgen Koch, spent 8 years as a member of the Governing Board of the IEA and helped found the IEA's Renewable Energy Unit. He notes that “[t]he work IEA is doing on renewable energy is in general first-class. However, the amount of money allocated to renewable energy is far, far too small to really make substantial progress with the tasks we are facing”.¹⁰⁸

In addition, the IEA has been chastised by a coalition of scientists and politicians established to analyse official energy industry predictions for consistently publishing the least accurate forecasts for wind energy.¹⁰⁹ A “senior official” of the IEA stated that the IEA had been “deliberately underplaying a looming shortage” of fossil fuels,¹¹⁰ and similar criticisms have been expressed in academic literature.¹¹¹

Goldthau and Witte see the establishment of IRENA as indicative of a broader systemic change taking place in global energy governance as a result of the pressing problems currently facing humanity. They argue that the energy sector “remains stuck in the world of twentieth-century governance, relying on institutions like the International Energy Agency” and that a “new architecture is needed for the twenty-first century”. They see IRENA as a step toward creating this architecture, stating that the Agency is “one piece of a reformed global energy framework”.¹¹² They do however note that IRENA can learn from the IEA's success, particularly with regards to country targets and action plans.

105 Kate Connolly and David Gow, “UK looks on from sidelines at green energy summit”, *The Guardian*, 26 January 2009, available on the Internet at <<http://www.guardian.co.uk/environment/2009/jan/26/irena-renewable-energy-summit>> (last accessed on 20 December 2011).

106 IEA, Renewable Energy, available on the Internet at <http://www.iea.org/subjectqueries/keyresult.asp?KEYWORD_ID=4116> (last accessed on 20 December 2011).

107 Tom Young, *infra* note 123.

108 Ben Block, “Interview with IRENA Director General Nominee Hans Jürgen Koch”, World Watch Institute, available on the Internet at <<http://www.worldwatch.org/node/6172>> (last accessed on 20 December 2011).

109 James Murray, “IEA accused of ‘deliberately’ undermining global renewables industry”, *Business Green*, 12 January 2009, available on the Internet at <<http://www.businessgreen.com/bg/news/1806340/iea-accused-deliberately-undermining-global-renewables-industry>> (last accessed on 20 December 2011); Rudolf Rechsteiner, *Wind Power in Context – A Clean Revolution in the Energy Sector* (Berlin: Energy Watch Group, 2008), at p. 10.

110 Terry Macalister, “Key oil figures were distorted by US pressure, says whistleblower”, *The Guardian*, 9 November 2009, available on the Internet at <<http://www.guardian.co.uk/environment/2009/nov/09/peak-oil-international-energy-agency>> (last accessed on 20 December 2011).

111 See Kjell Aleklett *et al.*, “The Peak of the Oil Age – Analyzing the World Oil Production Reference Scenario in World Energy Outlook 2008”, 38(3) *Energy Policy* (2010), pp. 1398 *et seq.*

112 Andreas Goldthau and Jan Martin Witte, *Global Energy Governance: The New Rules of the Game* (Harrisonburg, Virginia, USA: Brookings Institution, 2010), pp. 189–190.

Although the IEA may be partially a response to the IEA's perceived lacklustre commitment to renewables, there is no reason for this to act as a barrier to IRENA and the IEA creating synergies and benefiting from each others work where appropriate and the two organisations have reportedly had a "great start" to their relationship.¹¹³ Indeed, the first work programme refers to intended collaboration with the IEA on a range of IRENA's projects¹¹⁴ and one of the key initial activities of the Agency, as will be outlined below, has been to expand on IEA data in order to produce a renewable energy atlas and a statistics database.

While the IEA has, as discussed above, made some inroads into renewable energy, it is also clear that there are genuine concerns about the ability of the IEA to drive renewable energy growth. The IEA was not set up for this purpose, has only 28 member countries, is focussed on fossil fuels, and has a very small budget to dedicate to renewables. IRENA by contrast is an organisation of international scope, with a mandate and budget solely devoted to renewables. Given that renewable energy is not the IEA's core priority, the establishment of IRENA ensures that the most appropriate body is allocated to tasks: IRENA's focus on renewables will leave the IEA free to pursue its core activities.

While the IEA has undoubtedly been, and will continue to be, an important organisation, it is also a part, as Goldthau and Witte suggest, of an outdated energy governance system that does not adequately promote renewable energy. If renewables are to play a more expansive role in the global energy mix there is a need to reinvigorate this system, and IRENA could be an important part of this broader shift in energy governance that will ensure a swift transition to a clean energy future. Indeed, some have noted that IRENA will become the equivalent of the IEA for renewable energy.¹¹⁵

4. Portal Proliferation Syndrome

The first work programme sets out plans for a number of new information repositories. While access to information can undoubtedly facilitate better policy and greater uptake of renewables, IRENA must ensure that it does not fall victim to what the Climate and Development Knowledge Network jovially calls "Portal Proliferation Syndrome".¹¹⁶ This is a common pitfall of knowledge sharing

efforts whereby a new "portal" for information is developed with the ambitious intention of becoming a "one-stop shop", but ultimately only adds yet another piece to an already fragmented puzzle. The presence of numerous organisations in one field exacerbates this problem, though it can be mitigated by ensuring that any new portal for information either addresses gaps in the existing knowledgebase or collates and consolidates information sufficiently well to genuinely become recognised as the best source in the field.

Again IRENA appears, at the very least, to be aware of this issue, seeking to collaborate with existing repositories and stakeholders. Information availability is obviously crucial to creating a strong foundation for renewable energy policy and development and IRENA can potentially play an important role, similar to that of the IEA, in collating and improving information. IRENA seems to have made good progress in this area, as discussed below, and it seems that IRENA's profile will enable it to ensure that the information it produces is widely distributed and used, rather than becoming an additional underutilised resource. It is therefore hoped that IRENA can avoid this pitfall and implement truly useful data tools.

5. Outstanding Institutional Issues

There remain a number of institutional issues that the Agency will need to clarify. While these are not debilitating, they will direct time and resources away from the Agency's substantive work when the Agency cannot afford to delay this work any further.

113 Alice Bisiaux *et al.*, "Summary of the Fifth Preparatory Commission and First Assembly of the International Renewable Energy Agency", *supra* note 47, at p. 8.

114 Draft decision regarding the work programme, *supra* note 66, Arts. 34, 37 and 44.

115 "IRENA – The IEA of the Renewable Energy Sector", *Energy Matters*, 19 December 2008, available on the Internet at <http://www.energymatters.com.au/index.php?main_page=news_article&article_id=254> (last accessed on 20 December 2011).

116 Climate and Development Knowledge Network, "Seeking a Cure for Portal Proliferation Syndrome", 8 June 2011, available on the Internet at <<http://www.cdikwn.org/2011/06/portal-proliferation-syndrome>> (last accessed on 20 December 2011).

Firstly, privileges and immunities are to be established through a separate agreement. At the First Assembly, the parties adopted a decision requesting that the Director-General submit a draft agreement to the Council for its consideration next year. The Council will submit this draft agreement to the second session of the Assembly for approval. Thus the issue remains unresolved at present, though it is hoped that it will be resolved by the second session of the Assembly.

Secondly, and most critically, the mechanism for electing the Council is yet to be agreed upon. The Statute does not provide for this and the Governance Committee has requested that the Council determine the rules for electing members on a rotating basis and report to the second meeting of the Assembly. The substantial powers of the Council, including the ability to influence and substantiate the work programme and to submit matters to the Assembly for consideration, mean that the election of the Council is highly politicised. At the First Assembly, the election of the Council proved to be a “difficult issue”, with “negotiations and tradeoffs” taking place outside the main session over many hours.¹¹⁷ Therefore it seems unlikely this issue will be resolved easily.

While the first consideration is somewhat academic, the latter is much more of a problem. IRENA was intended to avoid this type of bureaucratic wrangling, as this can stifle genuine progress. IRENA has already been the site of some politics in relation to its establishment, mentioned previously, and this issue must be resolved quickly to ensure that further political arguments do not slow the substantive work of the Agency.

6. Strategic Focus

While the work programme sets out IRENA's activities for its first year, there remains some uncertainty as to what its strategic focus is, and what it will be in the future. While this uncertainty is partly a reflection of the fact that IRENA's mandate overlaps with those of other organisations, leaving the Agency's direction somewhat unclear, it is also a product of differing views among members. The Director of the IITC, Dolf Gielen, notes that the role of IRENA is guided by its membership,¹¹⁸ but that role is difficult to accurately discern when no consensus has yet been reached among members and no strategic priority has emerged as the key focus for the Agency. Thus discussions surrounding the Agency's strategic focus accounted for much of the discussion among participants at the First Assembly.¹¹⁹

Broadly, four schools of thought emerged from the First Assembly as to what the main focus of the Agency should be.¹²⁰ Members have attributed more or less weight to development, knowledge and technology, policy advice and facilitating access to finance. Thus the first work programme attempts to balance each of these areas.

Navigating the competing priorities of members will be difficult. For example, while the Agency has identified development as a priority, developed countries are keen to ensure that IRENA does not simply become a development agency and may already harbour concerns about the Agency, given that the first work programme's initial focus will be Africa and the Pacific. Yet developing countries have understandably focused their attention on development, and some have contemplated the possibility that IRENA could become a source of funding itself.¹²¹

The balancing of these priorities is likely to become clearer as IRENA determines what gaps need to be filled in the international effort to promote renewable energy and particularly with the publication of IRENA's strategic framework for 2012–2015. While the Agency may decide to cover all four thematic areas, this could result in the Agency's resources being spread too thinly.

Alternatively, if the Agency does try to cover all four areas, then care must be taken to ensure the activities undertaken fill a specific need in the current institutional landscape and that work is not unnecessarily duplicated. This links to the issue of

117 Alice Bisiaux *et al.*, “Summary of the Fifth Preparatory Commission and First Assembly of the International Renewable Energy Agency”, *supra* note 47, at p. 9.

118 Dolf Gielen, “Global Frameworks to Support Renewable Energy Technology and Innovation” (2011), available on the Internet at <http://www.irena.org/DocumentDownloads/news/DG_ISES_010911.pdf> (last accessed on 20 December 2011).

119 Alice Bisiaux *et al.*, “Summary of the Fifth Preparatory Commission and First Assembly of the International Renewable Energy Agency”, *supra* note 47, at p. 8.

120 *Ibid.*, at p. 9.

121 *Ibid.*

overlapping mandates, discussed above, in that some organisations already focus on particular areas. For example, REEEP is focussed on development, while the IEA is more centred on data and statistics. Again this shows that mapping the institutional landscape and discerning where the gaps and synergies lie is a crucial task in the early years of the Agency.

7. Limited Resources

It seems questionable whether IRENA's means are adequate for its objective, as the budget seems low in light of the lofty aims that the Agency has set itself. This is particularly the case if the Agency intends to have a broad coverage across the thematic areas enumerated in the previous section. The budget as it stands totals \$23.76 million. One commentator describes this as “depressingly limited”.¹²²

By way of comparison, the annual budgets of the IEA and International Atomic Energy Agency are €26 million (US\$37 million)¹²³ and €315 million (US\$448) respectively.¹²⁴ In the first three months of 2009, the oil, coal and gas industries of the US leveraged US\$44.5 million in their campaign to defeat a cap and trade scheme bill in that country,¹²⁵ which is approximately double IRENA's budget.

IRENA has already experienced some budgetary difficulties. The first Director General of IRENA, Hélène Pelosse, presided over an \$8.4 million shortfall in the budget before resigning. While the current Director-General, Adnan Amin, is optimistic about the budget, given the increasing number of countries signing up and contributing funds, he

remains cautious, noting that the money is given with a wide range of expectations, as discussed above.¹²⁶

If IRENA is to become the peak body it intends to be, it must ensure that it has sufficient funds available. To this end, the Agency must seek additional funding from all states. This is, of course, far easier to propose than to effect, as states are conscious that they are spending their tax payers' money. States are unlikely to be comfortable increasing funding until it is seen that IRENA is having a significant impact, but the potential for impact is lessened by IRENA's limited funding. This issue has undoubtedly been exacerbated by the slow start that IRENA experienced, despite the intention that it would be established quickly, and its initial budgetary problems.

X. Activities to Date

After a slow start, IRENA “appears to finally be running at full steam”,¹²⁷ and has begun work on a range of substantive activities. These activities give a flavour of what is to come, and it will be useful to assess these activities to see whether IRENA is on track to steer a course through the obstacles it faces.

The earliest substantive activity of IRENA is its involvement in the Tonga Energy Road Map project (TERM). The aim of TERM is to “reduce Tonga's vulnerability to oil price shocks and achieve an increase in quality access to modern energy services in an environmentally sustainable manner”.¹²⁸ IRENA's role was to assist Tonga in developing an off-grid component of the TERM in order to provide Tonga's outer island communities with access to electricity. IRENA used a recent meeting with the

122 See Terry Macalister, “WikiLeaks shines light on shady back-room deals that gave renewables HQ to Abu Dhabi”, *supra* note 31.

123 Tom Young, “International Renewable Energy Agency launches today”, *Business Green*, 26 January 2009, available on the Internet at <<http://www.businessgreen.com/bg/news/1803825/international-renewable-energy-agency-launches>> (last accessed on 20 December 2011).

124 IAEA, “The IAEA Regular Budget for 2010”, 27 June 2011, available on the Internet at <<http://www.iaea.org/About/budget.html>> (last accessed on 20 December 2011).

125 Suzanne Goldberg, “Barack Obama's key climate bill hit by \$45m PR campaign”, *The Guardian*, 12 May 2009, available on the Internet at <<http://www.guardian.co.uk/environment/2009/may/12/us-climate-bill-oil-gas?intcmp=239>> (last accessed on 20 December 2009).

126 April Lee, “Mr Unflappable, the great green persuader”, *The National*, 28 October 2011, available on the Internet at <<http://www.thenational.ae/thenationalconversation/industry-insights/energy/mr-unflappable-the-great-green-persuader?pageCount=2>> (last accessed on 20 December 2011).

127 Tony Price, “IRENA moves forward on several fronts”, *Renewable Energy World*, 27 October 2011, available on the Internet at <<http://www.renewableenergymagazine.com/energias/renovables/index/pag/panorama/colleft/colright/panorama/tip/articulo/pagid/17634/botid/47/>> (last accessed on 20 December 2011).

128 Government of the Kingdom of Tonga, *Tonga Renewable Energy Road Map 2010–2020*, Final Report (Tonga: 2010), at p. 1.

Tongan Government to present its plans, noted above, to conduct Renewable Energy Readiness Assessments for the Pacific island nations.¹²⁹ The Agency comments that the Tongan experience can provide “valuable insights” into how these assessments may be conducted.¹³⁰ In particular, it is submitted that the TERM project can illuminate what the content of such assessments should be, and serve as an example of how IRENA can work with other organisations on future projects.

In July 2011, the Agency hosted the High-Level Africa Consultative Forum on Renewable Energy (the Forum). The Forum aimed to provide an opportunity for ministers of energy from Africa to engage with a wide range of renewable energy experts and for the Agency to discuss specific challenges facing Africa and practical approaches to “generate the critical policy and technical information, advice and capacity that is required” to facilitate renewable energy deployment in Africa.¹³¹ This activity serves a number of purposes, including engaging with stakeholders toward the eventual development of Renewable Energy Readiness Assessments for Africa, providing policy advice, and building capacity. These first two projects show the initial focus of IRENA on Africa and the Pacific, as two regions that could benefit greatly from increased capacity and transfer of knowledge regarding best practice.

More recently, in October 2011, The Agency convened a workshop involving leaders from the Pacific region entitled “Accelerated Renewable Energy Deployment in Islands”. The workshop was convened so that IRENA could discuss and identify the needs and challenges facing island states in deploying renewable energy. In addition to providing expert assistance to the Pacific, the workshop

identified areas where IRENA can support and assist renewable energy deployment in the region. The information gathered at the workshop will inform the Agency’s Renewable Energy Readiness Assessments, as well as other potential activities in the region, such as capacity building and policy advice.

Having identified a need to fill gaps in renewable energy information, IRENA has developed, in partnership with the Clean Energy Ministerial Multilateral Working Group on Solar and Wind Atlas and the World Meteorological Organisation, a renewable energy atlas and statistics database. The project collates existing information and presents it as a map, highlighting gaps, and has been used to profile renewable energy uptake in the Pacific and Africa.¹³² The database will continue to be developed by drawing on UN and IEA data.

IRENA has also identified financing measurement as a “bottleneck” for resource assessment. The Agency has begun to negotiate a scheme for renewable energy financing with the World Bank Energy Sector Management Assistance Programme.

The Agency has partnered with the Global Wind Energy Council to undertake an analysis, based on a selection of case studies, of the optimal policy and regulatory settings for increasing the uptake of wind energy. This is a further example of how IRENA can leverage the expertise of other organisations and its international focus to undertake projects that will help facilitate the uptake of renewables at a broad policy level. This analysis is intended to be used as the basis for work plans for individual countries, which suggests that IRENA is taking inspiration from the successes of the IEA, as mentioned above. This initiative will subsequently be expanded to other renewable energy technologies such as solar and geothermal.

The abovementioned partnership with REEEP looks set to deliver similarly broad and ambitious projects. REEEP will assist in establishing a database on education and training and will help IRENA to establish a Renewable Energy Learning Platform, an online tool that will provide states with access to information regarding best practice in renewable energy. The MOU also discusses plans to jointly implement capacity building programs, information exchange and knowledge sharing regarding policy and financial frameworks, identification and replication of successful local business models and joint outreach activities.

129 IRENA, “One year after the official Signing Ceremony of the 2010–2020 Tonga Energy Road Map (TERM) in Abu Dhabi”, 3 June 2011, available on the Internet at <http://www.irena.org/News/Description.aspx?PriMenuID=16&News_ID=116&mnu=pri&NType=Nws> (last accessed on 20 December 2011).

130 *Ibid.*

131 IRENA, “IRENA Hosts High-Level Africa Consultative Forum on Renewable Energy, Abu Dhabi, UAE, 8–9 July”, available on the Internet at <<http://www.irena.org/menu/index.aspx?mnu=Subcat&PriMenuID=30&CatID=79&SubcatID=105>> (last accessed on 20 December 2011).

132 See Tony Price, “IRENA moves forward on several fronts”, *Renewable Energy World*, 27 October 2011, available on the Internet at <<http://www.renewableenergymagazine.com/energias/renovables/index/pag/panorama/colleft/colright/panorama/tip/articulo/pagid/17634/botid/47/>> (last accessed on 20 December 2011).

The above activities seem to be very promising, and there have been some encouraging hints at IRENA's future direction. Firstly, it is clear that IRENA is assessing the institutional landscape and aiming to partner with organisations that can effectively assist the Agency in developing its projects. This will ensure that IRENA is not treading on the toes of organisations already conducting effective work in this area and will help IRENA operate within its budget as the costs of the projects are spread. It also seems that IRENA has made progress in identifying specific areas that require work.

Secondly, the latter activities, such as the renewable energy atlas, statistics database and the wind energy analysis project show how IRENA can draw together disparate sources of information, augment the data, and provide a detailed, consolidated source of information that is readily accessible. This data can then be used as the basis for policy design.

Thirdly, the initialisation of Renewable Energy Readiness Assessments have a strong developmental flavour, which perhaps reflects the Agency's desire to develop programs that are applicable to all states, but that can assist developing countries in particular. The Renewable Energy Readiness Assessment framework can be used by other states, so they benefit from the development of the framework, but IRENA's limited resources are committed to assisting those states that do not yet have the resources or the capacity to undertake the assessments themselves. This strikes a balance between the differing views of stakeholders discussed previously.

XI. Conceptualising IRENA

Having introduced the Agency and analysed the challenges it faces, it is now apt to ask what the likely contribution of IRENA to the development of renewable energy will be. Before attempting to answer this question it is first necessary to ask what IRENA actually is, and what it should be.

It is easiest to first state what the Agency is not. It has been made clear that it is not a funding agency, nor is it a development agency. It is not intended to undertake renewable energy projects itself and will not be involved in negotiations between states or between parties to a renewable energy project. It is also clear that IRENA is not a

research and development centre.¹³³ Nonetheless, some of these lines have already been blurred, as IRENA is working with the World Bank to develop funding strategies, working on projects applicable to both developing and developed countries, but developing them in concert with developing countries in Africa and the Pacific, and is allocating 20 scholarships to students to undertake studies in relation to renewable energy technology at the Masdar Institute.¹³⁴

The express purpose of the Agency, to "promote the widespread and increased adoption and the sustainable use of all forms of renewable energy",¹³⁵ does little to suggest how the Agency should be conceptualised. The discussion in the first part of this paper outlines that an international body has been created, with the usual bureaucratic mechanisms that might be expected. The second part of this paper has suggested that IRENA faces an array of challenges, the biggest of which seems to be an institutional "identity crisis" that has arisen as a result of the enthused establishment of an agency for a good cause, but perhaps with insufficient advanced consideration of what exactly is to be achieved and insufficient consideration of the relevant organisations already in existence. However, the preceding section outlined a range of activities that have been undertaken to date that do suggest that some sense of direction is emerging.

The above discussion has identified some important roles for IRENA. Perhaps the most compelling is that IRENA can act as the international representative of renewable energy on the world stage, what may be termed a peak body for renewables or the "IEA of renewables", to which states turn as their first point of call on renewable energy issues. Given IRENA's establishment of close relationships with other organisations, it may be that IRENA will become something of a coordinating body over

133 Dolf Gielen, "Global Frameworks to Support Renewable Energy Technology and Innovation" (2011), available on the Internet at <http://www.irena.org/DocumentDownloads/news/DG_ISES_010911.pdf> 11 (last accessed on 20 December 2011).

134 See IRENA, "IRENA Scholarship Programme", available on the Internet at <<http://www.irena.org/menu/index.aspx?mnu=cat&PriMenuID=45&CatID=85>> (last accessed on 20 December 2011), and IRENA, "Successful start of IRENA's Scholarship Programme", 16 October 2011, available on the Internet at <http://www.irena.org/News/Description.aspx?NType=NWS&PriMenuID=16&mnu=Pri&News_ID=146> (last accessed on 20 December 2011).

time, pooling the resources of organisations and administering projects that take advantage of the various strengths of different groups.

IRENA seems to have moved toward this conceptualisation recently with the first meeting of the Policy and Strategy Committee in September, where participants agreed that the Agency must “consolidate early progress to become a renowned global centre of excellence and a ‘one stop shop’ for renewable energy analysis and advice”.¹³⁶

XII. Contribution of IRENA to Renewable Energy

Given the above conceptualisation of IRENA as a figurehead for renewable energy, the Agency’s contribution to renewable is likely to be as a starting point for advice, capacity building and collaboration, and a clearing house for expertise, research and best practice. IRENA is in a position to collate and consolidate the information and experience accumulated by a wide range of actors and act, in the words of the Agency’s Policy and Strategy Committee, as a “one stop shop” for advice and information and capacity building activities. Most importantly, the Agency will give renewables an identifiable and unified presence on the international stage.

How much IRENA will be able to contribute to the increased uptake of renewable energy is a key question. It has been noted that IRENA faces considerable hurdles, and that initial progress has been slow. Some institutional issues remain and IRENA has not yet fully developed its identity as an inter-

national agency. However, the Agency does appear to be gaining momentum. The appointment of the new Director General, who has considerable experience in the area, has sped up this process, and the meeting of the Policy and Strategy Committee is a key step in the Agency “finding its feet”. The membership of the Agency has grown steadily, and so too will its budget, so long as the Agency can effectively consolidate its work to date and maintain its momentum.

The outlook then is optimistic. While the observer introduced to IRENA for the first time may rightly ask what is new about IRENA, it seems that there is potential for IRENA to become an important part of the global movement towards a clean energy future.

XIII. Conclusion

IRENA has come into being at a time of unprecedented energy challenges and opportunities. Although the Agency is well aware of the international community’s high expectations,¹³⁷ and despite a clear intention to quickly establish itself, progress has been slow. IRENA’s formative period was marked by a “lack of transparency and reported mismanagement”,¹³⁸ and the incoming Director-General described the period leading up to the First Assembly as being full of “missed opportunities”.¹³⁹ One commentator was less diplomatic, describing the speed of progress as “glacial”.¹⁴⁰ Given that the first work programme is largely concerned with establishing the early foundations and relationships for ambitious and long-term initiatives, it is unlikely that the progress of the Agency in terms of substantive output will feel much quicker for some time, though the commencement of some practical work in the field is cause for some positivity in this regard.

Added to these concerns is the pressing issue of what IRENA’s role will ultimately be. On the one hand, there are already a number of organisations that promote renewable energy as part of their mandate, and the Agency is clearly conscious of this, with the work programme attempting to locate IRENA’s place at the table. On the other hand, IRENA’s singular focus on renewable energy, and a mandate from 148 states to be *the* renewable energy organisation, will ultimately situate IRENA at the head of the table.

¹³⁵ The Statute specifically mentions the following forms of renewable energy: bioenergy; geothermal energy; hydropower; ocean energy (including, *inter alia*, tidal, wave and ocean thermal energy); solar energy; and wind energy. *Ibid.*, Art. III.

¹³⁶ See on the Internet <http://www.irena.org/News/Description.aspx?NType=NWS&PriMenuID=16&mnu=Pri&News_ID=133> (last accessed on 20 December 2011).

¹³⁷ Draft decision regarding the work programme, *supra* note 66, at p. 3.

¹³⁸ Alice Bisiaux *et al.*, “Summary of the Fifth Preparatory Commission and First Assembly of the International Renewable Energy Agency”, *supra* note 47, at p. 9.

¹³⁹ *Ibid.*, at p. 2.

¹⁴⁰ Terry Macalister, “WikiLeaks shines light on shady backroom deals that gave renewables HQ to Abu Dhabi”, *supra* note 31.

To a large extent, the Agency remains a blank canvas. It is yet to be seen how the Agency will fare in its interactions with the UN, the IEA, and other organisations, and how its activities will dovetail with the activities of those organisations. Additionally, some institutional issues persist and the Agency's strategic focus remains to be definitively

identified. While these are significant challenges, the Agency has equally significant support and enters the fray at a time of unprecedented energy challenges and commensurate interest in renewable energy. Thus it is hoped, with a reserved optimism, that IRENA can and will become the global voice of the renewable energy era.