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IRENA and Germany's Foreign Renewable Energy Policy

Aiming at Multilevel Governance and an Internationalization of the Energiewende?

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Content

Introduction 3

History of RE negotiation in multilateral fora: A story of failed attempts 3

The German initiative for IRENA: The domestic dimension 4

Founding IRENA: International (geo)politics 8

2009 – 2011: Getting IRENA to work – Two years in limbo 10

IRENA: A unique multilateral body in a fragmented energy governance landscape 11

IRENA's core activities 12

Strategic policy choices ahead: IRENA facing a rapidly changing energy landscape and diverging interests 13

In lieu of a conclusion: IRENA and the German Energiewende 15

Introduction

One of the pillars of the German "Energiewende" consists of the expansion of renewable energies (RE) in the German energy mix. Indeed, RE promotion has a longstanding record in Germany's domestic policies. What is sometimes overlooked is Germany's remarkable record in foreign renewable energy policy and international governance on RE. Germany successfully initiated the creation of the International Renewable Energy Agency (IRENA) in 2011 - an intergovernmental organization with global membership, dedicated to the worldwide promotion of RE. With the German Energiewende of June 2011, the European and international dimension of RE promotion becomes even more important. IRENA, created as an end in itself, may now gain even more momentum in promoting the transition into a sustainable energy system in industrialized, emerging and developing countries. IRENA is a truly multilateral institution with a widespread membership. Its creation against the background of a multipolar world and a fragmented institutional governance landscape for energy seems to be a puzzle or a "miracle" (Urpelainen & Van de Graaf, forthcoming). An analysis of the politics behind explains this "wonder", and is equally essential to understand IRENA's current policy approach and institutional design.

IRENA's creation is a high-level policy signal that RE is an increasingly important option for tackling global energy challenges. Germany has been the engine and the brain behind. This paper traces IRENA back to its origins, focusing on the political processes within Germany and at the international level. In mid 2013 – two years after IRENA's creation and the announcement of the Energiewende – the crucial question is whether and to what extent IRENA can serve as a platform to internationalize an energy transition.

IRENA has received only scant attention in the academic literature on global energy governance. Recent analyses on international energy policy such as Hirschl (2009), Cherp, Jewell & Goldthau (2011), Lesage, Van de Graaf & Westphal (2010) and Colgan, Keohane & Van de Graaf (2011) briefly refer to the new player. Röhrkasten & Westphal (2012) analyze IRENA's role in global energy governance and draw policy recommendations on how to strengthen it. Van de Graaf (2012,2013) provides the most comprehensive analysis of IRENA's founding process so far, interpret-

ing it as a institutional hedging strategy against the IEA. Urpelainen & Van de Graaf (forthcoming) ask if IRENA's creation can serve as a model of institutional innovation in global governance.

The paper relies on interviews with almost twenty policymakers and experts involved in the founding process of IRENA. In that respect, the paper builds upon firsthand and insider information, and provides insight not yet published in the literature.

History of RE negotiation in multilateral fora: A story of failed attempts

Considering the history of RE in multilateral negotiations, the mere creation of IRENA – and even more so its widespread membership – is remarkable. A glimpse at the history of the UN prior to IRENA's creation reveals only very few attempts to address the promotion of RE. These attempts did not go beyond general appraisals.

At the beginnings of the 1980s, promoting RE gained attention on the international agenda for the first time. The oil price shocks of the 1970s had raised worldwide concerns on fossil fuel dependence and thus triggered thinking about developing alternative forms of energy. In its publication on the "Limits to Growth" the Club of Rome draw public attention to resource finiteness (Meadows et al. 1972).

In 1981, the UN held its first intergovernmental conference on renewable energy. The UN Conference on New and Renewable Sources of Energy in Nairobi focused especially on oil-importing developing countries, which were particularly hit by the oil price increases of the 1970s (Odingo 1981:106; United Nations:689). At the conference, North-South transfers of technological and financial resources were the most controversial issue. Interestingly, the creation of an international organization for renewable energies was already an issue, yet with a different purpose and design. Many developing countries demanded firm commitments from industrialized countries, including internationally agreed targets for financial contributions and the unrestricted flow of technical information. They called for the establishment of an international organization for monitoring purposes. Industrialized countries strongly opposed these

demands, calling for a redistribution of existing financial resources instead of creating new mechanisms (Biswas 1981:331; Odingo 1981:106; Rowlands 2005:82; United Nations :690). After the conference, the promotion of renewable energy disappeared from the international agenda and shrinking and relatively stable oil prices reduced the economic pressure to develop alternatives to fossil fuels.

Twenty years later, at the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa, in 2002, focused on setting up internationally agreed targets and timetables for the adoption of RE, phasing out fossil fuel subsidies and transferring clean energy technologies to developing countries. Yet, RE and energy subsidies were among the most controversial issues at the conference, and no substantial agreements were reached (IISD 2002:7; Karlsson-Vinkhuyzen 2010:184; Najam & Cleveland 2005:128; Rowlands 2005:86-88). Member countries of the European Union together with Norway, New Zealand, Switzerland, Iceland, Tuvalu and Eastern Europe Countries called for time-bound targets for renewable energy's share in global energy supply. Yet, developing countries' representatives along with the US, Australia, Canada and Japan strongly opposed this proposal. The G77/China feared this would "divert attention away from the primary goal of ensuring universal access to energy services for the poor" (IISD 2002:7) whereas the US, Australia, Canada and Japan criticised the lacking flexibility of a one fits all approach.

In 2006 and 2007, the 14th and 15th sessions of the UN Commission on Sustainable Development (CSD) focused on energy for sustainable development. Several irreconcilable cleavages arose. Germany, on behalf of the EU, proposed time-bound targets on energy efficiency, RE and access to energy and called for a review mechanism. Yet, these proposals were blocked by the G 77, particularly the Gulf States let by Saudi Arabia (IISD 2007).

It was only in September 2011, when the UN General Secretary announced the Sustainable Energy for all (SE4ALL) initiative that the UN started to take real action on RE. This initiative, endorsed at the Rio+20 Summit, seeks to double the global share of RE by 2030, double the improvement rate for energy efficiency and ensure that access to modern technologies is available to all. As the UN processes show, in international policy making RE has been closely related to development, and more precisely to sustainable development.

In 2007, the 15th session of the UN Commission on Sustainable Development (CSD) focused on energy for sustainable development. Whereas delegates unanimously underlined the importance of energy for sustainable development, poverty eradication and achieving the MDGs, several irreconcilable cleavages arose. Germany, on behalf of the EU, proposed timebound targets on energy efficiency, renewables and access to energy and called for a review mechanism. Yet, these proposals met strong opposition. At the end of the session, the chair presented a compromise document as "take it or leave it" which did neither contain time-bound targets nor reference to a review mechanisms. G77/China, the US, Canada and Mexico accepted the document; the EU and Switzerland rejected it (IISD 2007).

This experience marked a turning point for the German government. Disappointed by the UN processes on renewable energy, it decided to push for renewable energy outside of the UN framework, building on a coalition of the willing instead of trying to achieve an UN-wide consensus. Three context factors opened an important window of opportunity for creating a new international organization on renewable energy: fossil fuel prices had been rising tremendously, climate protection gained political priority and the financial crises had not yet unfolded.

The German initiative for IRENA: The domestic dimension

With its initiative to create an IRENA, the German Government was able to shape an international organization that widely matches its initial ideas. Whereas it managed to set up IRENA within a very short period of time, it took lengthy processes within Germany until the Government actually committed itself to push for IRENA's creation. Next to the deception with UN processes on RE, two domestic factors were central for this policy change: the persistency of a policy entrepreneur and party politics.

The German initiative to create IRENA would not have been possible without the commitment of Hermann Scheer, a late parliamentarian of the Social Democratic Party (SPD), who in 1999 received the alternative Nobel Prize for his dedication for RE. It was him who developed the initial idea on an internation-

al organization for RE and who lobbied since the 1980ies, both within Germany and abroad, to make his idea come true. Scheer used the European Association for Renewable Energy Eurosolar, a platform he had founded in 1988, intensively for this purpose. Yet, it was not until the German Government backed the idea that implementation started.

In the run-up to the Earth Summit in Rio de Janeiro 1992, Scheer published a Memorandum for the Establishment of an International Solar Energy Agency (ISEA) within the UN (Scheer 2009 [1990]). Main task of the proposed organization was the "unconstrained international technology transfer in the field of direct and indirect solar energies (in other words: renewable energy sources)" (Scheer 2009 [1990]:9). Although he called for a global institution, he regarded developing countries as the main target group of its activities. Scheer presented environmental concerns as the main motivation behind his proposal, underlining environmental damages caused by fossil fuels and risks of nuclear energy. He argued that an ISEA should contribute to the development of RE the way the International Atomic Energy Agency (IAEA) had done for nuclear energy.

At this point of time, it was not the German but the Austrian Government Scheer convinced of his idea. Party politics seem to be an important reason behind this: Germany was ruled by a conservative-liberal coalition whereas the Austrian chancellor was a social democrat. At the UN General Assembly 1990, the Austrian Government suggested the UN to consider the founding of an ISEA as an intergovernmental organization at the global level. Scheer also presented his idea in the UN headquarters. In the run-up to Rio 1992, the UN Secretary General Pérez de Cuéllar established the United Nations Solar Energy Group on Environment and Development (UNSEGED) to develop proposals on promoting renewable energy. These proposals also comprised the creation of a renewable energy agency. Yet, the preparatory committee of the Rio conference did not put it on the agenda (Scheer 2009 [2000]:27). According to Scheer, this was due to several reasons: There was widespread resistance against RE, the UN bodies and the specialized energy organizations IEA and IAEA wanted to avoid competition, and many states disapproved to create a new UN

body as they were not satisfied with the work of the existing ones. As a consequence, the ISEA proposal was not pursued further.

Ten years later, in the run-up to the WSSD in Johannesburg 2002, Scheer renewed his proposal for an intergovernmental body for RE, publishing the Memorandum for the Establishment of an International Renewable Energy Agency (IRENA) (Scheer 2009 [2000]). This time he called for an organization outside the UN system as the UN principle of consensus seemed to pose an insurmountable obstacle for the creation of such a body. To avoid the veto power of single states, a coalition of the willing should take the lead. Besides, he changed the agency's denomination to make clear that it should cover RE in general and not only direct solar energy as the former name had falsely suggested. The activities proposed in the 2000 memorandum cover IRENA's to-date-mandate but are going beyond, as IRENA was thought to engage in the development and coordination of standards and norms as well (Scheer 2009 [2000]:29). In a speech on his proposal, Scheer underlined the need to create a countervailing force vis-à-vis the IAEA:

"The same international effort that has been put into the development of nuclear energy is required for the development of renewable forms of energy, particularly so in view of the fact that the world's energy problems are more acute than ever. Anyone who believes that a specialised agency for renewable energy is unnecessary ought to be consistent and stop providing funds for the IAEA's technology transfer activities. (...) It is imperative that renewable energy receive equal treatment with nuclear energy within the system of international treaties and institutions" (Scheer 2009 [2001]:45)

In 2001, Eursolar organized an international impulse conference for the creation of IRENA. At the conference, German Development Minister Heidemarie Wieczorek-Zeul expressed her political support for an IRENA (Wieczorek-Zeul 2009 [2001]). Yet, the German Government still pursued a different agenda. At the WSSD 2002, Germany was a strong advocate of the EU proposal for time-bound targets on global RE shares. As the Summit did not produce the desired outcomes, Germany decided together with other EU member states and Small Island Development States to establish a loose international coalition of like-minded countries, the Johannesburg Renewable Energy Coalition, to engage in a more ambitious

¹ "Die größten Hindernisse gegen IRENA waren mentale", Interview by Franz Alt with Hermann Scheer, July 2009, http://www.hermannscheer.de/de/index.php?option=com_con_tent&task=view&id=697&Itemid=172 (accessed February 14, 2009).

cooperation on renewable energy (Hirschl 2009:4411; Rowlands 2005:88; Suding & Lempp 2007:5). In their Coalition Declaration, they underline the importance of renewable energy targets for the development of renewable energy markets and, ultimately, a substantial increase in the global share of RE. Besides, the German Chancellor Gerhard Schröder announced that Germany would host an international conference on RE.

In 2002, Scheer together with the parliamentarian of the Green Party Hans-Josef Fell managed to include the demand for an IRENA into the agreement of the government coalition between Social Democrats and the Green Party (SPD & Bündnis 90/Die Grünen 2002:36f.). During its first term (1998 – 2002), the coalition had introduced major policy measures to strengthen the promotion of RE within Germany. In 2002, they also moved the responsibility for RE legislation from the Ministry of Economics and Technology to the Ministry for the Environment, Nuclear Safety and Nature Conservation, which would later become the central force for the German initiative to create IRENA.

Despite the declaration in the coalition agreement, the Government did not enforce IRENA's creation. The Environment Minister Jürgen Trittin, a member of the Green Party, was reluctant to promote an idea that was so closely related to a SPD politician. And the Environment Ministry aimed at the creation of an UN Environment Organization and did not want to campaign for the creation of two international organizations at the same time. In 2003, the parliamentary groups of SPD and Greens called upon the Federal Government to take concrete steps for founding an IRENA (Deutscher Bundestag 2003). Although Scheer's proposal always referred to an intergovernmental body, the Environment Ministry and the Ministry for Economic Cooperation and Development stated in an internal paper that an IRENA could take different institutional forms, ranging from a non-governmental organization (NGO) to an international organization.

To assess the different institutional options, the Environment Ministry commissioned an extensive study (Pfahl et al. 2005). The study analyzed the usefulness of the different institutional forms with

regard to the following activities: providing advisory services for governments, enterprises, financial institutions and NGOs; enhancing scientific analysis and evaluation, strengthening education and training, promoting renewable energy via public relations and outreach activities, and providing financial support. It presents three options that could enhance international cooperation on RE: creating a new international organization, mandating UNEP as a central coordinating institution and setting-up a new partnership or strengthening an existing one. Although the study underlines that founding an intergovernmental organization would be the best option for the worldwide promotion of RE, it raises doubts concerning its political viability, and therefore proposes to establish a new partnership.

At the international conference Renewables 2004 in Bonn, the German Government did not want to raise the issue of creating an IRENA. Instead, it initiated the creation of the policy network REN21. Financed by the German Government, REN21 is a multi-stakeholders forum including governments, private sector, research institutions and NGOs from energy, development and environment sectors. REN21 shall promote a rapid expansion of renewable energy in both developing and industrialized countries. Its overarching goal is to promote favorable policies for renewable energy, focusing its action on three areas: framing priority issues in international and national policymaking processes, highlighting benefits and promoting knowledge generation and information flow. 3 It major publication has become the REN21 Global Status Report, reporting on the yearly developments of RE worldwide. Parallel to the Renewables 2004 conference, an International Parliamentary Forum for Renewable Energies was held, chaired by Hermann Scheer. 310 members of parliament from 67 countries attended this Forum. Contrary to the government conference's silence on IRENA, they explicitly called for its creation (EUROSOLAR & World Council for Renewable Energy 2009).

Within the German Government, the Renewables2004 conference was considered a big success. The conference was prepared by five regional conferences (in Berlin, Brasilia, Bangkok, Nairobi and Sana'a) mobilizing global attention on RE. The Bonn Renewa-

 $^{^{2}}$ The Johannesburg Renewable Energy Coalition, Information Note N°1, Members, Objectives and Roadmap, Version 2.5 dd. January 31, 2005,

http://circa.europa.eu/Public/irc/env/ctf/library?l=/3sjrecsinfos notes&vm=detailed&sb=Title (accessed July 18, 2012)

³ Ren21, Mission and Concept, http://www.ren21.net/Portals/97/documents/Media%20Resour ces/REN21_Mission_and_Concept_060310.pdf (accessed July 18, 2012)

bles 2004 conference convened 3600 participants from 154 countries (high level representatives from governments, intergovernmental organizations, NGOs, the scientific community and the private sector) to discuss how to increase the share of RE in both developing and industrialized countries. Three themes were central at the conference: enabling political framework conditions, increasing private and public finance, and enhancing capacity building, research and development. The conference adopted three outcomes: A political declaration containing a joint vision for a sustainable energy future, 4 policy recommendations for RE addressing the role and responsibilities of key stakeholders (governments, intergovernmental organizations, local authorities, private sector and civil society)⁵ and an international action program, gathering more than 100 voluntary commitments by government and international organisations on RE targets, finance and other actions. With a view to the failure to reach agreement on RE promotion at the WSSD 2002, it was remarkable that the political declaration reached support by 156 countries. Later evaluation of the international action program by REN21 showed a high level of engagement, as the majority of the voluntary pledges where implemented.

It was due to the election of a new Government in 2005 that the resistance within the German administration against creating an IRENA was overcome. The coalition of Social Democrats and Greens was replaced by the "grand coalition" of Christian Democrats (CDU/CSU) and Social Democrats. At the first sight, this might seem as a blow to the idea of initiating an IRENA, as the Green Party used to be a strong advocate of RE. As three years before, the establishment of an IRENA was put into the coalition agreement (CDU, CDU & SPD 2005:42). This time, the distribution of cabinet posts let to a more favorable context for its realization: the three relevant ministries for pushing such an initiative - the Ministries of Environment, Development and Foreign Affairs - were now in the hand of one single party, the Social Democrats. This

⁴Renewables 2004, Political Declaration,
http://www.renewables2004.de/pdf/Political_declaration_final
.pdf (accessed July 18, 2012)

⁵Renewables 2004, Policy Recommendations,
http://www.renewables2004.de/pdf/policy_recommendations
final.pdf (accessed July 18, 2012)

⁶Renewables 2004, International Action Programme,
http://www.renewables2004.de/pdf/International_Action_Pro
gramme.pdf (accessed July 18, 2012)

facilitated Scheer's access to the relevant ministers. The development minister HeidemarieWieczorek-Zeul had already expressed her support in 2001 (Wieczorek-Zeul 2009 [2001]). The newly appointed environment minister Sigmar Gabriel communicated its support on a Eurosolar conference shortly before taking office (Gabriel 2009). The Ministry of Economics and its Conservative Minister Glos did not support IRENA's creation as they did not want to weaken IEA's role. Yet, they neither obstructed the initiative. And chancellor Merkel (CDU) also expressed her support for the initiative – yet without taking an active stance.

After a further deception with UN processes on RE, the Government finally started to take action for IRENA's creation. In 2007, Germany used its double presidency in the EU Council and the G8 to push for an international and EU-wide integrated energy and climate agenda (Geden, Droege & Westphal 2009; Lesage, Van de Graaf & Westphal 2009; Lesage, Van de Graaf & Westphal 2010). While Germany successfully promoted a 20% target for the expansion of RE in the EU, the 2006 and 2007 sessions of the UN CSD proved to be a serious blowback for the German strategy to promote RE on a global scale. Instead of approving the desired time-bound targets for a global share of RE, the session resulted without any agreement. While already an increasing number of G77 supported RE, the Gulf States let by Saudi Arabia blocked a decision underlining the importance of RE. After this experience, the Environment Ministry decided to change its strategy. Instead of trying to push RE within the UN, it decided to work on the creation of a new international organization for RE outside of the UN framework, uniting like-minded countries. Under the aegis of Karsten Sach, Deputy Director-General for International Cooperation, the Environment Ministry mobilized political support within the German Government. Together with the Development Ministry and the Ministry of Foreign Affairs, it started an international campaign for IRENA's creation. Three context factors opened an important window of opportunity for creating a new international organization on RE: fossil fuel prices had been rising tremendously, climate protection gained political priority and the financial crises had not yet unfolded.

As a first step, the Germany started bilateral consultations with major partner countries in Europe, Asia, Africa and America. It appointed three former ambassadors as special envoys⁷ to explore the political

⁷ Christian Hauswedell for Asia and North America, Hans-

viability of establishing an IRENA. Bilateral talks with EU member countries were conducted by Karsten Sach and his team from the Environment Ministry. As Germany expected political resistance by some EU member states, it did not try to get an EU-wide decision before starting extra-regional consultations. The special envoys visited countries Germany considered as influential and/or "like-minded", either due to strong diplomatic ties or the countries' interest in the promotion of RE. After gaining sufficient support, Germany decided to start the formal founding process.

Founding IRENA: International (geo)politics

Despite the resistance against the promotion of RE within the UN and the widespread skepticism to create a new international organization, IRENA was created within a very short period of time. In 2008, Germany started the formal preparatory process, soon joined by Denmark and Spain as major supporters to the idea.

In the course of the year 2008, four preparatory conferences and workshops were held. After the first Preparatory Conference in Berlin in April 2008, Denmark and Spain joined Germany in lobbying for IRENA's creation. Spain had actively started to promote RE domestically and Denmark had also a good record in promoting RE and was positioning itself as frontrunner prior to the Copenhagen Climate Summit in 2009, which was by then expected to become a success. Germany invited states it considered as politically important and/or interested in the promotion of RE to the preparatory process. Next to the countries visited by the IRENA-ambassadors, the group of invitees included the G8 states, European countries and countries such as Egypt, Jordan, Morocco and United Arab Emirates (UAE) that expressed their political support for creating an IRENA. Countries which actively promote RE at the

Ulrich Spohn for Latin America and Harald Ganns for Africa ⁸ In Africa, South Africa, Senegal, Mal, Ghana, Ethiopia, Kenya and Nigeria were consulted. In Asia, the special envoy visited China, India, Japan, South Korea, Malaysia, Singapore and Indonesia. On the American continent, the following countries were consulted: US, Canada, Brazil, Mexico, Chile, Argentina, Costa Rica and Colombia.

domestic level, countries with a high potential of RE deployment and countries which are faced with high levels of import dependency of fossil fuels or energy scarcity were especially supportive of the idea to create an IRENA. Several countries also expected to gain access to financial means by joining a new intergovernmental organization. Out of the world regions the IRENA-ambassadors visited, Africa was the one which expressed most political support. Within Latin America Argentina, Chile and Costa Rica were most supportive. On the Asian continent, the idea met more resistance. Here, only South Korea demonstrated a clear interest in founding IRENA. From the European side, Austria and the Czech Republic were strong supporters. It is interesting to note that Nigeria and UAE supported IRENA's creation despite of being OPEC-members. This group of countries had been resistant to promote RE within the UN context and was expected to oppose the idea of creating an international organization for RE.

The design and focus of IRENA today widely match the German proposal. In a policy paper prepared for the First Preparatory Conference, Germany characterizes the objective and activities of the proposed IRENA as follows:

"IRENA's main objective will be to foster and promote the large-scale adoption of renewable energy worldwide. This overall objective can be broken down into a number of concrete targets: improved regulatory frameworks for renewable energy through enhanced policy advice; improvements in the transfer of renewable energy technology; progress on skills and know-how for renewable energy; a scientifically sound information basis through applied policy research; and better financing of renewable energy" (The Government of the Federal Republic of Germany 2008:6).

As this statement illustrates, Germany aimed at an international organization that does not restrict its activities to developing countries, but instead follows a global approach. Accordingly, it wanted "a broad group of countries, including both large and small, industrialized and developing countries" to join the organization (The Government of the Federal Republic of Germany 2008:6). It underlines that IRENA shall act as a focal point for RE within international cooperation, ensuring that RE gain a stronger weight in international political processes. It further assures that IRENA will build on the principle of voluntariness:

"IRENA will not aim to draw up international regulations or treaties. It will provide its services as and when requested by member states or groups of member states. It will not involve itself in states' energy policies of its own accord or try to enforce policies. All its activities will be decided upon by members" (The Government of the Federal Republic of Germany 2008:6).

In this regard, the German proposal differs from Scheer's idea of an IRENA as an organization with regulative power. In addition, the German Government pursued an approach of framing RE in a positive way, without arguing against fossil fuels or nuclear energy. The German Government considered the winwin framing and a soft approach as crucial elements for gaining sufficient political support for its initiative.

During the preparatory process, some controversial issues already became visible. Participants discussed whether IRENA should engage in standardization and other regulative activities or in the financing of RE projects. Finally, it was agreed that regulation and standard-setting should not be a field of IRENA's activities. Instead of providing funding itself, IRENA should advise governments on financing issues. The question of what kind of RE to promote was also a topic of discussion. Some participants raised sustainability concerns with regard to biofuels and large hydropower. Within the German Government, these concerns were particularly shared by the Development Ministry. Participants of the preparatory process decided to include all forms of RE within IRENA's portfolio, yet added that these had to be used in a sustainable way. Concerning the institutional set-up, budgetary issues and IRENA's scope (coalition of the willing vs. broad membership) were debated. Finally, it was decided that IRENA should be open to as many applicants as possible and that its organizational structure should resemble UN structures, encompassing an Assembly, a Council and a Secretariat. In October 2008, the final preparatory conference took place in Madrid. Under the chairmanship of Karsten Sach, agreement was reached on the Statute, financing matters, criteria and procedures for selecting the Interim Director-General and the Interim Headquarters, and the design of IRENA's initial phase.

In January 2009, Germany invited to IRENA's founding conference in Bonn. Different to the preparatory process, it now invited all UN member states to join.

Still at this point of time, it was not yet clear if founding an IRENA would actually meet sufficient support in the international community. Nevertheless, Germany opted for a speedy proceeding. One important reason was the upcoming Federal election in September 2009. The Environment Minister Sigmar Gabriel wanted to found IRENA before the start of the Federal electoral campaigns. In addition, a speedy proceeding was hoped to counter political resistance. The plan worked out: To the surprise of the engine and the brains behind the whole negotiating process, Karsten Sach and his team, founding IRENA developed a landslide domino-effect: While they had hoped for some 50 signatories, IRENA counted with 75 signatories states in January 2009. As a result of the German leadership, IRENA widely matches the initial ideas

While the signature of 75 countries was a remarkable success for the establishment of a new international organization, it was not backed by a number of influential countries. The founding signatures did not include the emerging powers Brazil, China, India, Indonesia, Mexico and South Africa nor the G8 countries Canada, Japan, Russia, UK and USA (see also (Van de Graaf 2012)). Reasons of the countries varied. On the one hand, some countries still had general reservations against RE and feared that action would be taken against fossil fuels and nuclear energy. But the idea of creating a new international organization also met resistance. Here, the perceived inefficiency of international organizations and the financial burden imposed on member states were important arguments. Several IEA member states (France, Italy, UK, US, Canada, Japan, Australia) did not want to create a new international energy organization next to the IEA. Emerging countries such as China and Brazil raised sovereignty concerns. They feared that IRENA would work on standardization issues and impose constraints on the energy policy of its member states. In addition, Brazil was afraid that IRENA would disadvantage large hydropower and biofuels. Most of these countries decided to join IRENA afterwards. As of September 2013, only Brazil, Indonesia, Canada and Russia refrained from doing so. 9 According to Van de Graaf (2013:28), many governments became IRENA members because they did not want the IRENA to be created without being able to influence its institu-

⁹ IRENA, updates on IRENA membership, <u>http://www.irena.org/menu/index.aspx?mnu=cat&PriMenuID</u> <u>=46&CatID=67</u> (accessed September 26, 2013)

tional set up. The EU member states France and Italy signed the statute at the Founding Conference in January 2009. The US government changed its stance with the change of Government from Bush to Obama. According to Colgan, Keohane & Van de Graaf (2011) and Van de Graaf (2012), joining IRENA was a good opportunity for the Obama administration to signalize that it would take a different approach towards multilateralism and climate protection than George Bush. As close allies in energy policies, the UK, Japan and Australia decided to join the IRENA together with the US. In the following, they formed an alliance to influence the IRENA from within, trying to restrict its budget and to focus its activities on developing countries only. In January 2013, China announced that it will join IRENA.¹⁰

2009 – 2011: Getting IRENA to work – Two years in limbo

Although Germany aspired to locate IRENA's headquarters in Bonn, the question of headquarters location was purposely left open at the founding conference to create an additional incentive for interested governments to join - a strategy that proved to be successful, yet at the price of losing the headquarters. It was not until five months later, during the Second Session of the Preparatory Commission in Sharm El Sheikh, Egypt, in June 2009, that the politically sensitive decisions on headquarters location and the appointment of a director-general was placed on the agenda. During the founding conference in Bonn, Austria (Vienna) and the UAE (Abu Dhabi) formally submitted their candidacies for IRENA's headquarters. Germany (Bonn) and Denmark (Copenhagen) followed afterwards, but Denmark withdrew its candidacy later on.

Before and during the second preparatory session in Sharm el Sheik, almost 60 further countries signed IRENA's statute. Thus, in June 2009, IRENA already had more than 130 signatories.¹¹ Next to the decision of the Obama administration to join, the main reason behind this rapid increase in the number of IRENA signatories was indeed the open decision on headquarter location. To the surprise of many, the OPEC member UAE started an active diplomatic lobbying campaign to gain IRENA's headquarters. They pointed out that most international organizations were located in industrialized countries and that no international organization was found in the Arab world. Besides, they underlined their commitment for developing RE, especially referring to the plans of building a 100% RE city, Masdar City. Gaining IRENA's headquarters was a clear priority of UAE foreign policy. UAE visited several developing countries, especially in Africa and the Arab world. They promised generous funds for IRENA and announced to establish the Abu Dhabi Fund For Development to finance RE projects in developing countries.

Although Germany had successfully initiated IRENA's creation, IRENA and its headquarter location was not considered as a priority issue in German foreign policy, which by then focused on gaining a permanent seat in the UN security council. Neither the Foreign Minister nor the Chancellor actively supported the German campaign. Abu Dhabi won the race and got IRENA's headquarters. It had gained broad political support – not only from developing countries and close allies of the UAE but also from countries Germany considers as close allies, such as France and the US. Even out of EU member states, only half supported the German candidacy. As consolation, it was decided to locate the IRENA Innovation and Technology Center in Bonn. ¹²

At a moment in history, when the multipolar world has shaped out and the manifold crisis of multilateralism is evident, e.g. in the international climate negotiations, it is no less than a surprising success that a truly multilateral organization has been founded, endorsed and supported through a difficult initial phase. IRENA's headquarter location in Abu Dhabi seems to be a contradiction at first sight, yet is actually a strong political signal for the promotion of RE: Even oil exporting countries nowadays recognize their economic potential. The fact that IRENA is located in an OPEC member states often meets surprise and skepticism, but RE have been pushed in the UAE and also in Saudi-Arabia. For the UAE, hosting

 $^{^{10}}$ IRENA, China to join International Renewable Energy Agency, January 14, 2013,

http://www.irena.org/News/Description.aspx?NType=N&News_ID=287 (accessed September 26, 2013)

¹¹ After June 2009, the number of signatories grew relatively little. As of July 2013, 161 states have signed IRENA's statutes.

¹² Austria, which had also applied for IRENA headquarters, should get an IRENA Liaison Office. Yet, this Office has not been established to date as Austria so far failed to ratify IRENA's statutes.

an international organization is a question of national prestige. 13 It supports IRENA with generous financial means. This should become especially important during the stormy initial phase. The headquarter location was a serious blowback for the German Government: As it aspired to locate IRENA's headquarters in Bonn, it had refrained from naming a German candidate as director-general. Now, it ended without German headquarters nor a German interim director general. As first interim director-general, the Frenchwoman Helene Pelosse was elected. 14 Yet, she did not count with broad support by the member states and did not have a strong standing from beginning on. Until her resignation in October 2010, IRENA passed through a turbulent phase that heavily affected its reputation. Several countries withheld their financial contribution. These initial management and funding problems threatened to sink the organization into chaos even before its official inauguration. Here, the financial and organization backing by UAE and Germany was essential for survival. Both countries still provide by far most financial support, their voluntary contributions alone amount to almost 40 percent of IRENA's budget (IRENA 2012b:6). Only when the Kenyan Adnan Amin brought his great experience in multilateral processes to the helm did the project get back on course.

IRENA: A unique multilateral body in a fragmented energy governance landscape

As of September 2013, 160 countries support IRENA out of which 117 states and the European Union have ratified IRENA's statutes and further 43 states are signatories.¹⁵ Its global membership is a major feature that distinguishes IRENA from its conventional

 $^{\rm 13}$ See "UAE: Shaping the global future of renewable energy", Khaleej Times, June 28, 2013,

http://www.khaleejtimes.com/nation/inside.asp?xfile=/data/nationgeneral/2013/June/nationgeneral_June444.xml§ion=nationgeneral (accessed July 11, 2013).

counterpart, the International Energy Agency (IEA), which was created after the oil-price shocks in 1974 and that (still) constraints its membership to OECD-states.

IRENA is the first international organization dedicated to promoting RE. We have seen that institutional path dependencies and politics matter: IRENA was created outside the UN framework by the "entrepreneurship" of European RE frontrunners - Germany's lobbying activities were soon joined by Spain and Denmark. What truly distinguishes IRENA from most other institutions of international energy governance is its global scope, as it is open to all UN memberstates. Its widespread membership provides it with a high degree of legitimacy. Moreover, IRENA is characterized by the principle of equality of all members in decision-making processes. In this aspect IRENA references UN principles. Yet, in contrast to UN proceedings, IRENA's statute contains an important rule to diminish the veto power of single states: within the Assembly consensus is considered as achieved if no more than two members object (IRENA Statute: Art IX,F). Alongside its dedication to RE, its global scope represents the great added value of IRENA and a unique feature in comparison to other institutions dealing with RE like the German-funded policy network REN21, which regularly publishes a global status report on RE, and the Clean Energy Ministerial (CEM), in which the biggest economies cooperate ad hoc on matters relating to RE, clean technologies and energy efficiency.

IRENA encounters a complex institutional landscape in which it must first carve out its own position, especially in relation to the IEA, an autonomous organisation within the OECD which has recently extended its reach beyond the circle of its memberstates. Founded with the main task of providing emergency mechanisms in times of oil supply shortages, the IEA is nowadays the leader in international energy market analysis and related policy advice. Interestingly, in parallel to the founding of IRENA, the IEA began taking a greater interest in RE. The IEA has profited from political support by the G8 and has been strengthened by its engagement process to the major emerging economies. It is also better equipped than IRENA. The IEA with its membership limited to the 34 OECD member states has a budget of more than 26.6 million Euros and a staff of approximately 260. 16 IRENA has a budget of 20.9 Million Euro

¹⁴Further candidates were Hans Jörgen Koch (Denmark), Grete Faremo (Norway), ArthourosZervos (Greece) and Juan Jordana (Spain).

¹⁵ IRENA, updates on IRENA membership, http://www.irena.org/menu/index.aspx?mnu=cat&PriMenuID =46&CatID=67 (accessed September 26, 2013)

¹⁶ See IEA, FAQs: organization and structure,

and less than 100 members of staff.¹⁷ The IEA possesses the advantage of covering the entire spectrum of energy sources, and consequently also their interaction effects. Yet, the IEA keeps its cards very close to its chest when it comes to energy supply scenarios, which are a powerful tool for guiding decisions about different energy paths. It is often accused of favouring fossil fuels in its models, also partly because its findings have to be approved by its member-states, some of which have clear interests in the production of conventional and unconventional fossil fuels. Politics matter and they shape policy formulation and outcomes.

As a newcomer on the scene, IRENA has taken a soft stance vis-à-vis the "incumbents". It is defining its role through cooperation agreements with existing institutions. The Memoranda of Understanding signed include task sharing with the close counterparts like the IEA, REN21 or CEM. A central step for gaining international visibility has been IRENA's involvement within the UN SE4All initiative. IRENA serves as the RE hub for SE4All and collaborates in modelling a global roadmap for implementing the goal on RE. That is an important step towards marking out its own fields of activity. While this is a prudent policy at the very beginning, there is a danger of generating too many interfaces without possessing the genuine resources to fulfil the tasks taken on. This involves risks of both overstretch and external encroachment.

IRENA's core activities

IRENA has structured its activities around three areas. The Knowledge, Policy and Finance Centre (KPFC) serves as "a global knowledge repository and centre of excellence for renewables policy and finance issues". ¹⁸ It provides statistics on issues such as costs, employ-

http://www.iea.org/aboutus/faqs/organisationandstructure/ (accessed February 11, 2013); IEA, FAQs: recruitment, http://www.iea.org/aboutus/faqs/recruitment/ (accessed February 11, 2013).

ment and resource potential of RE, and analyzes policies, investment frameworks and socio-economic and environmental impacts of RE technologies. Next to policy assessment and technical advice, it develops a Global Renewable Energy Atlas, which so far focuses on solar and wind energy. In addition, it manages the joint funding facility with the Abu Dhabi Fund for Development (ADFD), which offers concessional loans for RE projects in developing countries. 19 The Country Support and Partnership Division (CSP) is responsible for one of IRENA's main activities so far: the Renewables Readiness Assessment, which aims at improving the conditions for RE deployment in developing countries. To strengthen the cooperation between island states, it launched the Global Renewable Energy Islands Network (GREIN). In addition, it developed the IRENA Renewable Energy Learning Platform (IRELP), which offers information on existing education and training opportunities. In future, it will also engage in capacity building.²⁰ The IRENA Innovation and Technology Centre (IITC) provides information on RE technologies and innovations, and translated these into tools for policy-makers. It publishes cost data for RE technologies and recently launched an IRENA Renewable Costing Alliance with the private sector. It assists member countries in technology planning and develops roadmaps that focus on specific technologies, regions or countries. In addition, it models the global roadmap REMAP 2030 for achieving the SE4ALL aim of doubling the share of RE in the global energy mix by 2030.²¹ Yet, in just the third year of its existence, it should not be a great surprise that IRENA's profile is still under development.

IRENA's objective is to "promote the widespread and increased adoption and the sustainable use of all forms of renewable energy" (IRENA Statute:Art. II). This includes bioenergy, geothermal energy, hydropower, ocean, solar and wind energy. Being neutral among all RE technologies is a fundamental value that guides IRENA's work (IRENA 2012a:6). IRENA's mandate is clearly defined: to be the global voice and knowledge base for the use of RE, to advise the

¹⁷ IRENA, Work Programme and Budget,
http://www.irena.org/DocumentDownloads/WP2012.pdf
(accessed July 18, 2013); IRENA, Annual Report 2012,
http://www.irena.org/DocumentDownloads/4thCouncil/C_4_2_Annual%20Report%202012.pdf (accessed July 18, 2013).

¹⁸ IRENA, "Knowledge, Policy and Finance Centre",

http://irena.org/menu/index.aspx?mnu=cat&PriMenuID=35&CatID=109 (accessed July 11, 2013).

¹⁹ IRENA, "Knowledge, Policy and Finance Centre", http://irena.org/menu/index.aspx?mnu=cat&PriMenuID=35&C atID=109 (accessed July 11, 2013).

²⁰ IRENA, "Country Support and Partnerships", http://irena.org/menu/index.aspx?mnu=cat&PriMenuID=35&C atID=110 (accessed July 11, 2013).

²¹ IRENA, "IRENA Innovation and Technology Center", http://irena.org/menu/index.aspx?mnu=cat&PriMenuID=35&C atID=112 (accessed July 11, 2013).

member-states on these matters and to serve as a network hub for international cooperation (IRENA 2012a).

Strategic policy choices ahead: IRENA facing a rapidly changing energy landscape and diverging interests

To date, IRENA has maintained its soft approach and positive framing, but there are strategic policy choices and sensitive issues ahead. Yet, what is nicely formulated touches upon strategic issues such as energy (supply and demand) security, the flow of energy and financial resources, and thus has consequences on geopolitics, geo-economics and market power. The "shale gas revolution" is a case in point, illustrating how shifts in energy use impact on geopolitics and international relations. RE does have the potential to change the energy landscape profoundly. Moreover, there a multiple "global energy dilemmas" at play (Bradshaw 2010): Due to geographical, climate, meteorological and topographical conditions the production patterns of RE will diversify and differ widely. There is no panacea and no one-sizefits-all approach, but solutions have to be tailored on the spot. Consequently, the major countries have already embarked on different energy paths (Westphal 2011:22), increasing heterogeneity in the energy world. Even more importantly, the preconditions differ widely around the world between (fossil) fuelrich and fuel-poor, importing and exporting countries. Challenges on energy infrastructure range from modernization to extension and new installations. Energy markets are highly fragmented, with statedominated and monopolized markets on the one side, and liberalized, competitive, deregulated energy markets on the other side. The structural differences are ample worldwide also in respect to the demand situation: industrialized countries have almost reached their peak in energy consumption, but emerging countries and developing countries have to cope with a (sharp) increase in demand. The "trilemma" of energy access, climate change and energy security remains a pressing issue. The challenge is to transform the existing energy system

into a more sustainable energy system while keeping the supply stable and secure without at the same time perpetuating existing use paths. In this respect the international dimension is exceptionally important. Not only the expansion of renewables, but also the contraction and conversion of the fossil/nuclear use path must be shaped proactively.

Two caveats have characterized IRENA from the beginning on: Although IRENA's declared goal is to promote RE globally, several countries want IRENA to concentrate its activities on developing countries. This policy cleavage is closely related to international politics: namely IRENA's relative strength in internationally energy governance and in particular vis-à-vis the IEA. IRENA's task is paramount: promoting RE implies challenging the existing conventional fossilfuel and nuclear based energy system. Here, the energy outlooks, data collection and modelling of market developments play a central role.

The above said closely relates to the question whether IRENA will become a "truly global promoter" of RE. There are powerful players such as the United States, supported by Australia and the United Kingdom, that aim to limit IRENA's remit to developing countries in order to protect IEA's role as the central energy organization of the OECD states, but also because of own energy interests and preferences for certain consumption paths and patterns.

From IRENA's very beginnings, there has been a political cleavage between a devotion to access to energy or RE as a global response to energy challenges. That translates into either focusing on developing countries or aiming at a global outreach. Countries that favour a global approach argue that only the widest possible expansion of RE may enhance global energy and climate security and that developing countries, countries in transition and developed countries alike need support in transforming their energy systems. Those in favour of a development orientation refer to the special needs of developing countries, the prevailing problem of energy poverty and lacking know-how, financial and technological resources. As a continuum from the beginning, this controversy has not yet been resolved. The US together with its close allies in energy policies, the UK, Japan and Australia, form a certain alliance from within, trying to restrict its budget and to focus its activities on developing countries only. With the exception of Japan these countries do have strong stake in the development of non-conventional fossil fuels. And notwithstanding, the US has promoted "the

Schiefergaswende" as an alternative path to the German "Energiewende".

So far, IRENA has had a stronger focus on developing countries. This is in line with the priorities of its Kenyan Director-General Adnan Amin, who regards action in developing countries as key. The Renewables Readiness Assessment for developing countries has been a cornerstone of IRENA's policy advice. And the Pacific Islands Developing States and Africa have been a major focus of IRENA's activities. Now, IRENA has started to expand its analytical and advisory services, underlining its global scope. IRENA's work on a global roadmap for SE4All and the recently initiated Global Costing Alliance serve as prominent examples. Against this background, it is important that the mid-term strategy explicitly states that IRENA is responsive and supportive to both developed and developing countries needs (IRENA 2012a:6).

Germany faces new systemic challenges and has an interest to promote RE. Germany perceives the rapid dissemination of renewables as crucial in order to minimize climate change and to ensure an inclusive sustainable energy supply. But the story is not only about the international significance of the German energy transition. It is also most obvious that national unilateralism will be more expensive than international cooperation as the massive and accelerated expansion of renewables demands for economies of scope and scale.

IRENA is still aiming at asserting its role and finding its position. In that respect, IRENA has reached a decisive crossroads. There are a number of sensitive policy issues ahead: The question if IRENA should serve as an advisory source only or engage in implementation and financing as well. Here, IRENA has so far taken an ambiguous stance. IRENA repeatedly underlines that it only provides advisory services. Yet, it also engages in the financing of RE projects in developing countries.²² While many IRENA member states from the developing world expect concrete support, IRENA could easily become overstretched if its takes on implementation functions. It could only sensibly fulfil the task with a considerable increase in its financial and personal resources. And that is unlikely to be politically attainable. To have a stronger impact on the implementation and financing of

renewable energy, IRENA could disseminate best practices and also engage in donor coordination.

IRENA is still lacking "a brand". IRENA is not yet the primary international point of reference for data and analyses concerning renewables. IRENA has to further develop and improve its analytical strength and own data bases. A comprehensive and reliable data base is of decisive importance for investment decisions and the efficient design of policy instruments. This information is crucial for influencing investment decisions of the private sector, as doubts over the potential of RE still prevail worldwide. Transparency is crucial in that respect: The newly launched Costing Alliance with the private sector is an important step into the right direction. It shall enhance information on costs, cost developments and the "bankability" of renewable energy projects, filling a central gap which is not yet covered by the IEA or other international institutions. When modelling market developments, IRENA should transparently communicate its assumptions and model designs. This could also put some pressure on the IEA to provide more transparency in its modelling and analysis. To avoid duplication of work, plain data collection should be coordinated between IEA and IRENA. But this is sensitive, because at the current stage, one of the core problems of IRENA is that of communication, visibility and outreach. Even though IRENA has already published a series of reports on the costs of technology development and market introduction of renewable, 23 which provide real added value, they have not gained much publicity, neither in the expert circles nor in the wider public. IRENA lacks a "flagship publication" such as IEA's World Energy

IRENA builds on the principle of *voluntariness*. Likewise, the positive framing of RE has been an important aspect to overcome resistance against IRENA's creation. IRENA wants to offer attractive and practically applicable services for its member states, and determinedly avoids seeking far-reaching political declarations, quantifiable targets or binding standards. So far, refraining from binding obligations has been an important asset for incentivizing countries to join.

http://www.irena.org/Publications/ReportsPaper.aspx?mnu=cat&PriMenuID=36&CatID=141 (accessed February 14, 2013).

²² In the first funding cycle, the IRENA/ADFD Project Facility provides concessional loans amounting in total to USD 50 million. See IRENA, "IRENA/ADFD Project Facility", http://irena.org/menu/index.aspx?mnu=Subcat&PriMenuID=3 https://irena.org/menu/index.aspx?mnu=Subcat&PriMenuID=3 https://irena.org/menu/index.aspx <a href="https://iren

²³IRENA, Reports and papers,

In lieu of a conclusion: IRENA and the German Energiewende

The fascinating thing with IRENA is that new policy orientations and beliefs, particularly on the role and function of renewable can re-shape the landscape of energy. In this paper, we aimed at demonstrating that IRENA since its creation has been dealing with one central cleavage: being a "development organization" or being a truly "global promoter" of RE. This does not only affect IRENA's internal orientation, but impacts on international politics, namely IRENA's relative strength in international energy governance, especially vis-à-vis the IEA: only a global focus could challenge IEA's role as the central energy organisation of the OECD states. This is closely related to global energy policies: is renewable energy moving from niche to pillar? Meeting this challenge is of paramount importance on the transition towards a more sustainable energy system. Normatively, IRENA's role is no less than to convince and to prove that renewable energies do offer policy choices for developing, emerging and industrialized countries. And this is what the German Energiewende-Foreign Policy is all about. It is decisive that at the current stage Germany and Spain face systemic, market and regulatory challenges while they have achieved a growing market share of RE in electricity mix.

It seems ever more pressing that a further penetration of RE requires effective climate and environmental policies and related tools. The above described voluntariness may soon hamper such pathways. To join efforts of frontrunners, international pledges to achieve certain RE targets and a related reporting and monitoring process may serve best. In that respect, the "Renewables Club" promoted by Germany may help IRENA for a certain period of time in its "balancing act": Acting as a global voice for RE, an advisory source for its member countries and a network hub for different cooperation initiatives, IRENA relies on a positive framing of RE, trying to avoid political controversies. In the next years to come, IRENA will have to turn its soft stance into more pronounced approaches when it comes to know how and technology transfer, intellectual property rights and related trade issues. IRENA will be the right place to reconcile conflicting interests and channel coordination with other international organisations. Any efforts to move

forward the agenda, such the recently launched "Renewables Club" of front-runners, are hopefully undertaken from *inside* the organization. ²⁴ There is a lot to gain from a concerted approach, but even more to lose from a "forum-shifting" and hopping around. Against the background of the "fracking revolution" and the disappointment with the international climate negotiations IRENA is the most promising effort to push for a worldwide transition into a more sustainable energy future and to overcome the hurdles and obstacles for RE by facing the existing "global energy dilemmas". For Germany's Energiewende-Foreign Policy IRENA's multilateral forum serves best.

http://www.irena.org/News/Description.aspx?NType=A&PriMenuID=16&catid=84&mnu=cat&News_ID=317 (accessed July 18, 2013).

 $^{^{24}}$ IRENA, "IRENA welcomes the Renewables Club", press release, 04.06.2013,

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