

## The Multifaceted Institutional Landscape and Processes of International Renewable Energy Policy

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There seems to be a proliferation of international partnerships and initiatives dealing with sustainable energy development. Even an informed observer is in danger of losing track over abbreviations like AP6, AREED, GBEP, GVEP, IAP, JREC, MEDREP, NEET, PCIA, REEEP, REN21 – to name only some of those which deal with renewable energy.<sup>1</sup>

In this article, we try to systematise the partnerships and initiatives in the context of the international energy policy process in order to make them visible as parts of an emerging arrangement in which the different initiatives take on specific roles. We shed light on the origins of the initiatives and their rationale. Finally, we make a first attempt to assess the opportunities and impacts, but also consider costs and risks of this system compared to other types of arrangements or regimes, such as the Kyoto Protocol.

### Rationale for the Renewable Energy Policy Action

The rationale for renewable energy being on the agenda of international policy processes lies in the discrepancy between its global benefits and its continued under-exploitation in many countries. As a newcomer in the energy sector, renewable energy (RE) needs considerable national policy support to assure market entry at equitable conditions, i.e., to create a level playing field. Furthermore, to fully unfold the external benefits of renewables, policy support is also needed to actively step up deployment through quota or preferential tariffs, to establish standards, and to promote R&D.<sup>2</sup>

International policy processes like UN CSD or G8, and in particular world summits like WSSD held in Johannesburg in 2002, constitute opportunities to influence national policies. They are the arenas to engage countries and other stakeholders to work towards common goals, and may even produce mutual or multilateral commitments which translate into national policies favouring renewable energies.

### A Renewable Energy Policy Jungle?

The international institutional arrangement for RE has become ever more complex during the last five years.<sup>3</sup> What we see today may look like a political thicket with increasingly interwoven relations between the numerous organisations active in the energy, environment, and development sector. These organisations include stakeholders from the public sector (different levels of government, UN organisations and other international organisations), the business sector (individual companies as well as associations and federations at regional/national/international level, dealing with manufacture, energy production and distribution, finance, insurance, etc.), and civil society (local/national/international NGOs of many different kinds)<sup>4</sup>.

For the purpose of this article, we shall describe as “initiatives” the various interactive relationships that have been created among these organisations.<sup>5</sup> Among the initiatives, the observer may distinguish:

- 1 Partnerships
- 2 Networks
- 3 Organised exchange of experience and plans
- 4 Voluntary public commitments
- 5 Conference series
- 6 Review arrangement

We delineate these initiatives from the international federations of business associations and international professional societies, which are numerous in the various fields of renewable energy technologies, as well as from clubs of ‘like-minded’ personalities or politicians. Organisations like the European Renewable Energy Council (EREC), the International Society for Solar Energy (ISES) or the World Renewable Energy Council (WCRE) have international policy perspectives. They are, however, more conventional and homogenous in their composition and constituency.

In addition, there exist renewable energy units and working groups within international energy, environment and development sector organisations, for example in the International Energy Agency (IEA). The German Government is currently consulting with counterparts about the options of creating an International Renewable Energy Agency (IRENA).

Finally, there are a multitude of bilateral or multilateral agreements or treaties on energy, in which RE are included<sup>6</sup>.

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See footnotes at end of text.

**Look into the Jungle Book!**

1. In partnerships, partners pool their skills and other resources to achieve their shared goals. As resources and liabilities must be shared, partnerships involve some formal structure or a shorter-term legal agreement to which their members must subscribe.

In GVEP, PCIA, and REEEP the partners' skills are combined with financial resources to advance projects for renewable energy deployment, energy efficiency and village energy development. MEDREP aims to provide sustainable energy services particularly to rural populations by tailoring financial instruments for RE projects, strengthening policy frameworks, reducing barriers, and building stronger private sector infrastructure. JREC was concluded in direct response to the Johannesburg WSSD, after it had become clear that global RE targets

were not to be attained. The Small Island Development States (SIDS) and European countries<sup>7</sup> founded the so-called 'coalition of like minded countries' to set more ambitious goals for themselves. This later became the JREC coalition, which many other developing countries joined. Today, membership is close to 100 countries.

In GBEP, different countries and international organisations collaborate to advance specifically the development of bioenergy in a sustainable way.

The "Implementing Agreement" programmes of IEA, some of which are on renewable energy, can also qualify as partnerships. Through the NEET initiative on technology and R&D cooperation, the IEA is linking up with the international business community, policy makers, researchers and other stakeholders in major developing countries (the so-called "Plus-Five" countries).

Renewable energy is also one of the subjects of the AP6 partnership, which brings together Australia, India, Japan, China, South Korea, and the United States to cooperate more closely on technology transfer and development to combat climate change.

**BOX 1: List and Abbreviations of Organisations and Initiatives****Organisations**

**UN CSD** - UN Commission on Sustainable Development [www.un.org/esa/sustdev/csd.htm](http://www.un.org/esa/sustdev/csd.htm)

**UN DESA** - United Nations Department on Economic and Social Affairs – [www.un.org/esa/desa](http://www.un.org/esa/desa)

**UNEP** – United Nations Environment Programme – [www.unep.org](http://www.unep.org)

**IEA** – International Energy Agency – [www.iea.org](http://www.iea.org)

**Partnerships**

**AP6** – Asia-Pacific Partnership on Clean Development & Climate [www.asiapacificpartnership.org](http://www.asiapacificpartnership.org)

**GBEP** – Global Bioenergy Partnership – [www.globalbioenergy.org](http://www.globalbioenergy.org)

**GVEP** – Global Village Energy Project – [www.gvep.org](http://www.gvep.org)

**JREC** – Johannesburg Renewable Energy Coalition – <http://ec.europa.eu/environment/jrec>

**MEDREP** – Mediterranean Renewable Energy Programme – [www.medrep.info](http://www.medrep.info)

**NEET** – IEA's Networks of Expertise in Energy Technology – [www.iea.org/neet](http://www.iea.org/neet) (see "IEA")

**PCIA** – Partnership for Clean Indoor Air – [www.pciaonline.org](http://www.pciaonline.org)

**REEEP** – Renewable Energy and Energy Efficiency Partnership – [www.reeep.org](http://www.reeep.org)

**Networks**

**GNESD** – Global Network on Energy for Sustainable Development – [www.gnesd.org](http://www.gnesd.org)

**ISPRES** – International Science Panel on Renewable Energies - <http://www.ispre.org>

**REN21** – Renewable Energy Policy Network for the 21st Century – [www.ren21.net](http://www.ren21.net)

**Organised Information Exchange**

**CSD Matrix** <http://www.un.org/esa/sustdev/csd/matrix.htm>

**Voluntary Public Commitment Programmes**

**IAP** – International Action Programme of *renewables 2004* – [www.ren21.net/iap](http://www.ren21.net/iap)

**Conferences**

**BIREC** – Beijing International Renewable Energy Conference – [www.birec2005.cn](http://www.birec2005.cn)

**Renewables 2004** – International Conference for Renewable Energies – [www.renewables2004.de](http://www.renewables2004.de)

**WIREC2008** – Washington International Renewable Energy Conference – (*planned*)

**WSSD** – World Summit on Sustainable Development (UN Millennium Summit)

**JPoI** – Johannesburg Plan of Implementation – (*see "WSSD"*)

**Associations, Clubs, others**

**EREC** – European Renewable Energy Council: [www.erec-renewables.org](http://www.erec-renewables.org)

**IRENA** – International Renewable Energy Agency (*discussed*)

**ISES** – Society for Solar Energy – [www.ises.org](http://www.ises.org)

**WCRE** – World Council for Renewable Energy – [www.wrce.org](http://www.wrce.org)

**G8** – Group of Eight Industrialised Countries

2. Networks are interrelated and generally non-hierarchical groups of independent organisations who gather around a specific issue or need, on which they share the same vision, and towards which they work collaboratively. They have a light-weight structure (or no formal structure at all). There are innumerable networks in the world. On a global level, REN21 has been created to link RE policy activities and initiatives worldwide on a high level. It brings together participants from all stakeholder groups to advance effective RE policy and provide international leadership in a flexible way. Its small secretariat is hosted by UNEP and supported by IEA.

ISPRE might also be considered a network. This panel consists of key RE scientists who work to improve renewable energy R&D strategies and policies worldwide. The effort links the science and engineering community with the RE policy community.

GNESD is a knowledge network of research centers in different countries all over the world, and partner organisations, the main one of which is UNEP. It provides analyses in the field of energy and sustainable development, by strengthening collaboration between its members in southern and northern countries.

3. An example of an organised information exchange is the so-called matrix, compiled at the UN CSD Secretariat. This is an openly accessible compilation of case studies provided by participating countries and organisations in CSD, on successful measures and projects in RE, among others. It was created for the CSD-14/15 cycle in 2006/07, during which energy is one of four focus areas. The matrix constitutes an action-orientated information base on lessons learnt of past projects in the four focus areas.

Like with past activities, mutual exchange on planned future activities is another useful information instrument. A compilation of plans and programmes of stakeholders with respect to renewables gives all interested parties a clearer vision of what can be expected from the different actors from public, private and third sector. This reduces insecurity and thus risks, and may encourage others actors to replicate success stories. A simple compilation can be further matured into a proper international programme if coordinated in time and content. Some countries are suggesting that UN CSD should organise such a compilation of ex-ante information, building on existing compilations like the International Action Programme (see below).

4. The International Action Programme (IAP) of the Bonn renewables 2004 Conference is more than a simple compilation of future actions, as it has an element of commitment and is, therefore, an example for a programme of voluntary non-binding commitments.

Already in Johannesburg, some voluntary pledges had been made for sustainable energy development, like the commitment by the German Government to create a fund of 1 million Euro for RE and EE.

This voluntary commitment approach was extended and systematised at the occasion of renewables 2004 Conference in what became the IAP. Participants in the conference were invited to hand in commitments for concrete measures or activities ("Actions") which they would carry out after the conference. Some 200 Actions were compiled in the programme. The content of the IAP was analysed to evaluate the impact. This analysis showed that the programme will contribute significantly to CO<sub>2</sub> reduction, investment and employment. Two years later, a follow-up by REN21 demonstrated that 79% of the Actions were implemented<sup>8</sup>.

Such voluntary commitment are open arrangements, but need a convener and host, as well as someone to register the Actions and monitor progress documented through implementing reports. Voluntary commitments recommend themselves as tangible outcomes of conferences.

5. Conferences are initiatives in form of an event, or - if a sequence is established - in form of series. A good example is the "IREC" series of conferences which have taken place since WSSD.

In Johannesburg, Germany took the initiative to invite the countries and all stakeholders to the International Renewable Energy Conference in Bonn in June 2004 ("renewables 2004")<sup>9</sup>. This conference was an overwhelming success in several respects. By its sheer size and participation, it demonstrated the significance of renewable energy, and helped renewable energy to be considered as a major option in the future global development. It filled with confidence the participating stakeholders, as so many – and important – participants demonstrated significant commitment to renewables: along with several European countries the commitments of China and international financial institutions, like the World Bank, were clearly visible.

The success of the Bonn conference led the Chinese government to invite to the Beijing Inter-

national Renewable Energy Conference (BIREC) in November 2005. BIREC highlighted the significance of renewable energy in another high level setting.

With the announcement of a possible third conference to be held Washington (WIREC 2008), to be supported internationally by the stakeholders convened in REN21, a series is emerging regarding high-level and highly visible RE conferences. If Bonn renewables 2004 placed RE into the mainstream of energy development, WIREC 2008 may be the moment that marks the maturity of renewable energy technologies to become the major option for future energy.

6. Finally, review arrangements may be considered initiatives in their own right, where they are not directly foreseen in the plan of implementation or other conclusions, outcomes, or declarations of international processes. In the case of the JPoI<sup>10</sup>, a review is foreseen. In the case of the IAP, a follow-up was already carried out. The UN CSD, too, contains a “built-in” review arrangement, as the first year of each cycle is dedicated to review (followed by the policy implementation cycle). However, an effective global RE review is missing, if we do not consider as such an arrangement REN21’s annual Renewables Global Status Report<sup>11</sup>, which provides an authoritative review based on the most relevant information sources, such as the IEA.<sup>12</sup>

Some JREC member countries are pressing for an effective RE review arrangement to be linked to the UN CSD cycle, which should take into account and extend the existing efforts.

### **Fertile Ground for Initiatives: a Thorny Negotiation Process on the General Level**

What are the origins of these initiatives and why are they thriving? The Johannesburg 2002 World Summit WSSD which took place ten years after the famous Rio 1992 ‘Earth Summit’<sup>13</sup> may be considered the ‘mother’ of many new partnerships and initiatives. Many participating countries and organisations considered WSSD as the great opportunity to achieve concrete quantified commitments for renewable energy (e.g., in the form of long-term targets) to which governments could be held accountable – similar to the CO<sub>2</sub> reduction targets of the Kyoto Protocol. During the summit it became clear that these ambitious and concrete results were not going to be achieved on a generalised level within the UN community.

The likelihood that the main outcome, i.e., JPoI, was going to formulate rather vague objectives with respect to renewable energy had been anticipated already in the run-up to the summit. This led to the formation of partnerships before and in the course of the negotiations during WSSD as alternatives to the failed attempt to reach a strong general outcome. These partnerships were called “Type-II initiatives”, to distinguish them from the general negotiated outcome.

The emerging architecture with respect to RE is part of a similar development in many other fields where the UN system is not able to deal with issues comprehensively. The creation of dynamic initiatives is a reaction to the inherent difficulties of the UN system and dissatisfaction of some Governments and other stakeholders with the role the UN system is able to play.<sup>14</sup>

Apart from UN summits and commissions, another important generator of initiatives is the G8. A G8 Renewable Energy Task Force was set up in 2000, which produced a report with recommendations in 2001<sup>15</sup>. This task force ceased to exist when it became clear that important G8 members did not back it at that point in time. More recently, existing initiatives like REN21 and REEEP were endorsed by the G8, and new initiatives related to renewable energy were adopted in the Gleneagles Plan of Action of the 2005 summit<sup>16</sup>, some more narrowly related to specific renewable energy issues such as biofuels (GBEP), some more broadly defined on clean energy technology collaboration with the G8plus5 countries, which was to become NEET.

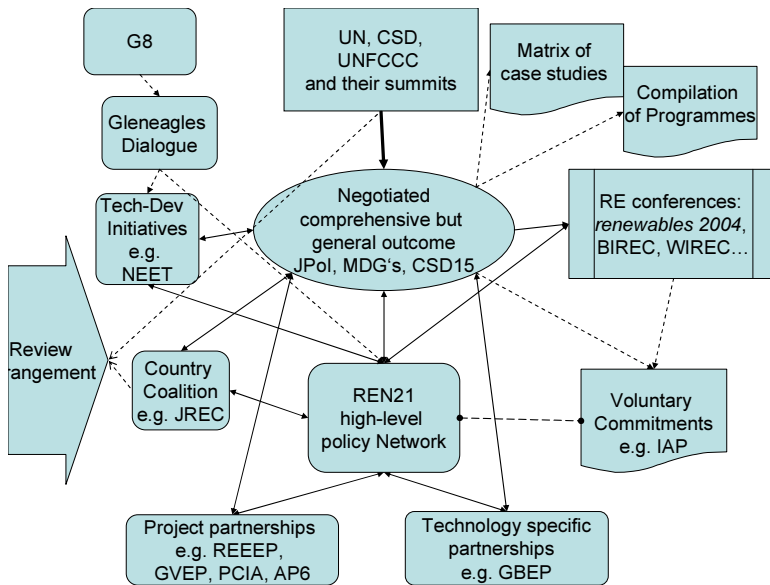
### **The Emerging Architecture of a Core Agreement and Complementary Initiatives**

Looking at the antecedents of initiatives, it is obvious that there is a relationship to negotiated outcomes of UN- and other multilateral conferences. With respect to RE development, the partnerships, conferences and voluntary commitments have been created partly to compensate the lack of concreteness and impulse from the WSSD. CSD makes a virtue of necessity and welcomes input from the partnerships to its negotiations, especially by listing them and offering partnership fairs.

Since Johannesburg, the dichotomy of a comprehensive but general committing outcome (the JPoI) and partial issue-specific initiatives (Type II Partnerships) began to exist. The negotiated outcome can be considered as core and lowest common denominator, while everything else is considered as complement to bring more concrete results that would not be achievable in the plenary assembly. Over time, this dichotomy seems to have evolved into a recognised system, with some countries like the U.S. making

extensive use of the partnership approach. The U.S. Government has structured a general concept<sup>17</sup> using the various initiatives, called “featured solutions”, in which experience with solutions are suggested to be scaled up in a “next step”.

In the following graph, the negotiated binding outcome is depicted as centrepiece, with the initiatives surrounding it as complements. It shows how - around a general negotiated outcome – an arrangement of a variety of RE initiatives has emerged (i.e., partnerships, networks, conference series, information exchange and voluntary commitment programs). While the flexible character and dynamism of these diverse initiatives clearly brings advantages, it is recognised that they should not ‘float around’ completely detached from one another or the formal international policy process.



REN21 is placed in the middle of the initiatives, as it has been established to connect the manifold initiatives and organisations to channel their work vis-à-vis the policy level (“Network of Networks”). It has links with the project and technology oriented partnerships, the G8 process, and of course with the “IREC” conference series (with the Bonn conference marking the starting point also for REN21).

### What Can Initiatives Deliver?

To characterise the general negotiated outcome and the complementing initiatives, the antonyms general – partial/specific, global – regional, binding – non binding, compulsory – voluntary, formal – informal, vague – concrete, and others are useful.

The negotiated outcomes of global processes are formal, general and binding by definition, with a high degree of legitimacy. They tend to, however, be generic and often vague. If concrete

results are strived for, the negotiations become time consuming and may end in failure.

In view of a probable stalemate on ambitious binding goals (e.g., when a worldwide RE target is sought by part of the assembly but rejected by the other), it seems to be an effective way forward to agree on what the common denominator in the general outcome is and leave specific, more ambitious commitments to initiatives. Typically in initiatives, either the all-embracing condition is given up and only willing partners form coalitions, or the formally binding character is given up and partners are invited to join voluntary efforts.

Partial (regional or sector-specific) arrangements may permit ambitious and even binding agreements. The recent agreement by the EU Heads of State and Government – to reach a 20% renewables target by 2020 – is a strong case in point.

Though legally non-binding, voluntary commitment programmes may ultimately become quite compromising - in particular if accountability is publicly demonstrated, as is the case with the IAP and its follow-up.

When the element of commitment is taken away, what remains is an information tool. That is about as much as the CSD-15 seems to be able to achieve.

### A Raison d’être for Initiatives

The multifaceted landscape of initiatives as a complement of a general, i.e., not specified and negotiated outcome is the result of years of trying, even pulling towards different directions by a multitude of stakeholders. In these circumstances, a framework of general agreements complemented by more ambitious but less formal initiatives is often the best achievable overall outcome-provided all partners in the initiatives work in good faith and with real commitment.

For the maximalist position, which considers global renewable energy deployment targets as necessary, this landscape is not satisfactory at all. However, even a strong proponent of renewable energy must concede, that the initiatives have considerable virtue.

The initiatives keep the dialogue going and offer numerous opportunities for discussion between players. They open opportunities for joint activities – which may include the ‘generally unwilling’ at

least in areas where they have ambitions and interest. In any case, they will bring together the willing to go further than the formal process would allow. Also, the initiatives have numerous technical advantages in comparison to a general agreement, such as low transaction cost and others.<sup>18</sup>

Those stakeholders who do not want to see global commitments, can maintain their position without bringing down every attempt of multilateral agreements - and may even find advantages in participating in some of the initiatives.

Critics may claim that the creation of ever more initiatives absorbs energy which should rather be concentrated on the principle objectives. Staging ever more meetings – without reducing the size and number of the meetings in the main process – may hold up the whole process from advancing, as it keeps the stakeholders busy - maybe trapped - in endless discussions and in myriads of ‘talking shops’.

For progress in the matter, this is a real danger. Initiatives may become cumbersome themselves, occupied with their own administration, and slowly fade before reaching substantial outcomes. If no progress is achieved, or if even the initiatives are joined by some partners in order to slow down advancement or to frustrate partial agreements on urgent and important matters like sustainability of bioenergy, then the purpose of the whole architecture of initiatives is inverted. Initiatives must guard themselves from suffering under the same blocking power of unwilling partners that formal negotiations do. Their institutional architecture must be capable to uphold a flexible membership base that is joined in their ambition to move forward.

This said, it should also be noted that initiatives may actually help bring value back to formal policy processes – ultimately making even strong binding commitments more likely. The architecture should strengthen rather than erode the legitimate UN system.

#### **Footnotes**

<sup>1</sup> See list of abbreviations in Box 1

<sup>2</sup> For an overview of rationale and policies for renewable energy see <http://www.ren21.net/REPolicies/default.asp>

<sup>3</sup> For a general overview see Achim Steiner et al.: *International Institutional Arrangements in Support of Renewable Energy*, in: Dirk Assmann et al (Ed.): *Renewable Energy, A Global Review of Technologies, Policies and Markets*, London, Sterling VA, 2006 , pp152

<sup>4</sup> For examples, see Box 1

<sup>5</sup> See Box 1

<sup>6</sup> A compilation of international treaties is prepared by the Energy and Environmental Security Initiative at Colorado School of Law, [http://www.colorado.edu/law/eesi/isea\\_profile.pdf](http://www.colorado.edu/law/eesi/isea_profile.pdf)

<sup>7</sup> The determination of the EU countries to work with targets can be observed in the recent decision 20% to 2020.

<sup>8</sup> For complete information on the IAP and follow up see and <http://www.ren21.net/iap>

<sup>9</sup> <http://www.renewables2004.de>

<sup>9</sup> See Box 1

<sup>11</sup> See for report downloads <http://www.ren21.net/globalstatusreport>

<sup>12</sup> See IEA *Renewable Energy Market and Policy Trends in IEA Countries*, OECD/IEA 2004; *Renewables in Global Energy Supply*, An IEA Factsheet, OECD September 2006.

<sup>13</sup> For an overview of the international renewable energy policy process see <http://www.ren21.net/PolicyProcess/default.asp>

<sup>14</sup> Fukuyama discusses such architecture in general terms in *Rethinking Institutions for World Order*, see Francis Fukuyama, *After the Neocons, America at the Crossroads*, Profile Books, London 2006,

<sup>15</sup> Find the report under <http://www.g8italia.it/UserFiles/347.pdf>

<sup>16</sup> See [http://www.fco.gov.uk/Files/kfile/PostG8\\_Gleneagles\\_CCChangePlanofAction.pdf](http://www.fco.gov.uk/Files/kfile/PostG8_Gleneagles_CCChangePlanofAction.pdf)

<sup>17</sup> See <http://www.sdp.gov>

<sup>18</sup> REN21 Secretariat: *Recommendations for International Commitment Schemes* (website): <http://www.ren21.net/iap/lessonslearnt/Recommendations.asp>