



UNITED NATIONS ENVIRONMENT PROGRAMME

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Программа Организации Объединенных Наций по окружающей среде      برنامج الأمم المتحدة للبيئة

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**DIVISION OF TECHNOLOGY, INDUSTRY AND ECONOMICS**

## **Summary of Discussions**

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**Roundtable on Financial Risk Management for Renewable Energy  
Projects in Emerging and Developing Countries  
13-14 October 2008, Paris, France**

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### DISCLAIMER

The following executive summary of the roundtable discussions was prepared for informative purposes. It does not illustrate the expression of any opinion on the part of the United Nations Environment Programme or of the Global Environment Facility concerning the legal status of any country, territory, city or area or of its authorities or concerning delimitation of its frontiers or boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the United Nations Environment Programme or of the Global Environment Facility.

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## **Background**

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The Roundtable on Financial Risk Management for Renewable Energy Projects was held on 13 and 14 October 2008 in Paris, France.

The event was organised within the framework of the programme “Assessment of financial risk management instruments for renewable energy projects” supported by the Global Environment Facility (GEF) and implemented by the United Nations Environment Programme (UNEP).

The following report outlines (1) the key debated issues and ideas expressed by panelists and participants at the roundtable, (2) the recommendations on public-private partnerships strategies for continuing to support the deployment of risk management instruments, (3) finally, it outlines UNEP’s commitments to follow-up on past work and on the recommendations made by roundtable participants.

## **Roundtable format**

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The Roundtable on Financial Risk Management for Renewable Energy Projects was attended by approximately 50 participants representing 33 different organizations - 28 private and 5 public - from both developing and industrialized countries.

The format consisted of a peer discussion among senior corporate and public representatives from the insurance, financial and renewable energy industries on specific financial risk management issues associated with renewable energy projects; the debate was structured around five sessions; there were no formal presentations but rather a lively exchange of ideas, experiences and proposals.

The Roundtable goal was to initiate a dialogue between leading market players and public representatives on the barriers to and opportunities for the development and use of financial risk management instruments in renewable energy projects in the context of different regions. The discussions led to:

- A presentation of products and services developed through successful public-private partnerships, under the UNEP umbrella;
- An assessment and regional comparison of successes and areas requiring further effort;
- A set of recommendations to UNEP and other international organisations;
- Knowledge sharing and networking among participants.



## **Message from Ms Sylvie Lemmet, Director of the Division of Technology, Industry and Economics**

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UNEP helps countries make sound and informed energy supply choices with a focus on renewable energy options and acts as a facilitator for the deployment of a new generation of financial instruments for the renewable energy sector.

UNEP partners with actors in key economic sectors and promotes the development of renewable energy resource information by bringing together information providers and users – notably investors and project developers.

UNEP has a number of climate and clean energy work streams, including many focused on the finance sector. Not being a financial institution itself allows UNEP to work in non-competitive ways with leading banks and insurers. UNEP's work is not to provide finance for projects in different sectors, in contrast to development banks, but to work hand in hand with the private sector and civil society to make investments happen.

The UNEP programme entitled “Assessment of financial risk management instruments for renewable energy projects” with support from the Global Environment Facility (GEF) has assessed the main risks that project sponsors face in the renewable energy markets of developing countries and identified a number of risk management tools that need to be enhanced.

Within the framework of the programme, a strong support was received from corporate champions who took the research initiative further by offering products and services developed thanks to seed support and technical assistance provided by UNEP through public-private partnerships.

Just to mention a few, companies such as ParisRe, MunichRe, RSA Insurance, Marsh, and CarbonRe, have partnered with UNEP and provided substantial time and resources to contribute to developing innovative new approaches.

Following successful UNEP feasibility studies:

- Paris Re is now offering an innovative Wind power derivative using an innovative reserve financial model at competitive and cost effective premiums on the weather cover markets of emerging and developing markets.
- A consortium led by Munich Re, RSA Insurance and CarbonRe is launching a Global Renewable Energy Insurance Facility with a special focus on medium and large scale projects in developing countries and offering in addition to standard renewable energy insurance, special insurance lines such as Country and Political Risk, Third Party Counter Credit and Credit insurance covers and consultancy services.

## 1. Highlights of roundtable discussions

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What follows are the minutes of the roundtable recounting the main ideas expressed by panelists and participants who interacted on key risk management issues. Discussions were structured around four sessions on the first day and one morning session on the second day of the roundtable.

### Session 1: Renewable energy investments: Global trends and assessing financial risks

#### *On the policy framework*

- Adequate support needs to be defined to assist renewable energy project sponsors in the event of counterparty default on payment obligations, force majeure business interruption, delay in start-up, etc.
- Lower subsidies to fossil fuels are needed in order to make renewable energy projects more cost competitive.

#### *On financing renewable energy projects*

- Renewable energy markets are increasingly attractive as they are not so correlated with other asset classes which carry a number of credit risks.
- Renewable energy projects in developing and emerging countries need to be structured as commercial investments and not just rely on the CDM framework. Other revenue streams that need to be focused on include power purchase agreements, green certificates and other financial incentives such as tax breaks. The use of adequate risk management tools could secure these revenues and ensure higher returns in investment.
- Risk management tools can be used to facilitate access to finance for renewable energy project developers, by lowering interest rates and requested equity shares for both small and large scale projects.

#### *On the role of insurance*

- Some insurers are not adopting an aggressive strategy and remain focused on a limited number of technologies and technology manufacturers.
- Insurance is often overlooked by project sponsors, who are mostly concerned by administrative and project management issues. However, the current financial crisis has shown that investors are exposing their money increasingly and this may change the risk appetite that project sponsors have had over the past. Insurance is expected to become a winner.

#### *On the main financial risks faced by investors*

- The main risks that investors face include counterparty risks, currency risks, project execution risk (delay in start-up, business interruption etc), technology risks, social risks (e.g. riots) and CDM registration risk.
- Appropriate financial and insurance products, legal support and change in mentalities are needed to address renewable energy specific risks.
- There are too many small CDM projects; innovative bundling approaches need to be developed as projects aggregation can bring small, medium and large projects to close. There is no one size fits all solution. Solutions need to be developed on a regional basis.

- There is a need to forecast the new carbon market risks that will appear after 2012 and if a new post Kyoto agreement is reached. Research and development should be conducted to assess the different scenarios.

## **Session 2: Enhancement of adapted insurance solutions**

### *On raising awareness on the need for insurance in renewable energy projects*

- There is a need to raise awareness among project sponsors and policy makers on the need for insurance<sup>1</sup>.
- Insurance is more responsive and cost effective than legal contractual frameworks when damage occurs. In this field, Public-private partnerships, engineering and technical expertise are needed to help the insurance industry better address individual risks on a facultative basis or to wider the scope of reinsurance treaties.
- In developing countries there is a need for an enhanced understanding of the risks and appropriate underwriting approaches. The insurance industry is on a learning curve when it comes to renewable energy markets. Furthermore, there is a serious lack of technical expertise; lots of small scale projects do not require reinsurance<sup>2</sup> but rather insurance. Much can be done in training the insurance industry of developing countries.
- The main difference between traditional and renewable energy projects consists in the difficulty to insure and to evaluate loss scenarios.

### *On the challenges faced by insurers on renewable energy markets*

- Issues faced by insurers include: Labour intensive underwriting processes given the multitude of individual risks; difficult monitoring of all the developments occurring in different geographic regions; project developers tend to approach experienced reinsurers because local insurers have no experience with the technologies.
- Issues faced by reinsurers: capacity should be added to facultative reinsurance which can reinsure individual risks that are not covered by treaty reinsurance.
- A common challenge for both the insurance and reinsurance industries is to adapt to rapidly changing technologies and to gather technology specific performance data to assess the risks and the loss scenarios.
- Engineering certificates and technologies classification constitute ways for insurers to keep track of changing technologies without adding to insurance premiums.
- On the design and maintenance of technologies, manufacturers' warranties have an average time period of 1-2 years which leaves more reliability on reinsurers who are expected to provide extended maintenance warranties (usually of 3 additional years).
- There is no mix of insurance expertise, e.g. property insurance with CER insurance. There is a need to overcome the segmentation of insurance products.

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<sup>1</sup> The example of wind turbines breaking down in three projects, located in the UK and Denmark within two weeks for which damages were estimated to approximately USD 3.5 Million per turbine was presented (see <http://www.youtube.com/watch?v=7nSB1SdVHqQ>).

<sup>2</sup> often provided by **international** reinsurance companies

- It is important to bring insurers and project developers together. Insurance can be more responsive and efficient if project pipelines are identified.
- There is no shortage of reinsurance or insurance capacity as renewable energy projects are rather small compared with other infrastructure projects.
- Treaty reinsurance is less costly than “per risk reinsurance”; the reinsurer accepts the treaty’s covered business based on a long-term relationship in which the reinsurer’s profitability is expected, but measured and adjusted over an extended period of time. Thus, reinsurers need to be brought in at the earliest stage of the project development.
- Pricing may become an issue in the future. Reinsurance treaties are negotiated on a yearly basis and the current financial turbulences<sup>3</sup> may drive prices up and tax benefits may be lost.
- Munich Re, RSA Insurance, CarbonRe and other consortium members have partnered with UNEP, to develop and launch a Global Renewable Energy Insurance Facility that would offer standard insurance and special lines which include Country and Political Risk, Third Party Counter Credit and credit insurance covers to project developers in developing countries. The facility website can be accessed at <http://www.insurance4renewables.com> (operational in December 2008)
- Marsh UK and China have worked with UNEP to assess the feasibility of the implementation of a Reinsurance Facility for large and medium scale wind farms in China and other South Asian countries. An implementation plan has been developed and the start of operations is envisaged.

### **Session 3: Developing Alternative Risk Transfer tools and financial risk management schemes for renewable energy markets of emerging and developing countries**

#### *On weather hedged risk management tools*

- There is a demand for enhanced alternative risk transfer instruments in developing markets. However, getting licenses for innovative products and overcoming cultural barriers are often a challenge.
- Weather hedged instruments were launched about 10 years ago in the US. The energy market represents about 60% of the global weather covers market. The leading country in weather derivatives is India.
- Weather derivatives, as index based products, are objective tools that investors appreciate. The main challenge is to collect complete sets of historical data to define a weather index for a derivative. Usually about 20 years of data are needed.
- ParisRe and Marsh have developed within the framework of a UNEP sponsored feasibility study, a wind derivative using a wind reserve financial model for an existing Mexican wind farm using 10 years of wind speed data collected from different neighbouring sites and using grid data to complement and to assess the reliability of site data. The result is a well assessed risk and a product offered at competitive premiums. The used methodology can be replicated to other emerging and developing economies.

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<sup>3</sup> The global financial crisis, which started with the subprime crisis in the USA in 2007, can affect the capital base of insurers. Further deterioration in the stock market, additional catastrophic losses, a recession, and broader economic factors could drive insurance price levels upward.

- The weather covers market is small and there is a lot that still can be done to help it grow. Furthermore, legal issues need to be taken into account. For instance, in many countries, such as Mexico, derivatives cannot be structured as financial contracts but rather as insurance ones.

*On the development of financial risk management schemes for small scale projects*

- There is a need for regional or national networks of investors, insurers, bankers and intermediaries. Such networks would help raise awareness on the opportunities in the renewable energy sectors of developing and emerging economies and initiate a dialogue with public institutions for the establishment of or awareness raising on the need for renewable energy policy frameworks.
- Besides technology transfer issues, there is a need to better understand and assess the demand, to bridge the knowledge gap and to bring investors, public stakeholders, risk managers and end-users together.
- A large number of business risks can be mitigated by providing entrepreneurs with the right support and by changing the perception of risks that domestic and international investors have.
- In the case of small scale insurance, projects portfolio insurance is sought; the challenge is to aggregate the risks, make small scale projects attractive for insurance and involve the private sector in the design and implementation of innovative approaches. The size of investments in a small scale project varies from USD 50,000 to USD 2 Million.
- Traditional banks in developing or least developed countries do not lend to small enterprises and Micro Financial Institutions (MFIs) do not benefit from the financial security that banks have. Partial guarantee mechanisms financed in part by domestic financial institutions are seen to be the most promising instruments and need to be further examined and implemented in partnership with local financial services and project developers.

*On financial risk management of large scale projects*

- Development banks should help facilitate investments in large scale renewable energy projects in developing countries.
- Domestic banks do not have enough capacity for large scale projects. Support by syndicating capital is needed to support mid-size to large scale projects.

**Session 4: Raising awareness on renewable energy market opportunities, existing risk management solutions and enhancing skills**

*On awareness raising*

- There is a need for an increased number of regional or national focal points that would accelerate renewable energy awareness among stakeholders with a focus on financing and risk management needs. A programmatic training approach is required for state utilities and other groups of stakeholders.

*On skills enhancement*

- Insurers and investors often have a negative perception of the risks associated with renewable energy projects, more work need to be done on identifying opportunities (e.g. through cost-benefits analysis and feasibility studies) and on awareness raising.

- A training kit that can be used by insurers and other renewable energy stakeholders on risk management for renewable energy projects, has been prepared by UNEP and contains the following training modules:
  - 1 – Climate Change
  - 2 – Renewable Energy Technologies and Risks
  - 3 – Underwriting Guidelines and policy
  - 4 – Claims handling and policy
  - 5 – Intermediaries and networks
  - 6 – Case study
- The training kit will be made available free of cost on the UNEP website during the last week of November 2008 at <http://www.unep.fr/energy/finance/risk> .

## 2. Recommendations

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### Session 5: Private Public Partnerships Approaches and practical recommendations for moving forward

What follows is a compilation of recommendations made by representatives from the insurance and financial industries during the fifth and last session of the roundtable held on 14 October 2008 with a special focus on building private-public partnerships (PPPs) to facilitate the deployment of risk management approaches and tools. These recommendations will be used as the basis for further consultations and in the development of programmes by UNEP and other GEF implementing agencies.

Areas of Work	Through private-public partnerships (PPPs)	Through public technical assistance and cooperation initiatives
<u>Communication</u>	i) Development of investment fundamentals for clean energy projects to help address Business/market risks, Counterparty risks, etc. ii) Analysing the current challenges in managing counterparty credit risk, and exploring the relevant best practices in risk monitoring, modelling and mitigation. iii) Training on specific risk management strategies for renewable energy and energy efficiency projects.	i) Improving the flow of information and building capacity on climate change talks and on regional and national policy initiatives. ii) Assessing market risks and opportunities, using different post 2012 scenarios - for use by investors and other project stakeholders.
<u>Renewable energy policy framework</u>	i) Improving the consistency and interpretation of renewable energy policies by both public and private stakeholders. ii) Advocating for increased engagement of project developers with the insurance industry.	i) Enhancing the legal environment for renewable energy projects and namely to address the counterparty and off-taker risks. ii) Further involvement of credit export agencies in

	<ul style="list-style-type: none"> <li>iii) Conducting a top-down approach in order to identify the key policy issues when dealing with project risk management.</li> </ul>	<p>renewable energy projects as debt repayment periods can be impacted by political decisions.</p>
<u>Certification and standardisation</u>	<ul style="list-style-type: none"> <li>i) Exploring the possibility of developing certification programmes for use by lenders and investors, as they do not process the technical due diligence that insurers undertake.</li> </ul>	<ul style="list-style-type: none"> <li>i) Enhancing quality control for renewable energy technologies through certification programmes to be used by investors and other project sponsors.</li> </ul>
<u>Large-scale financing</u>	<ul style="list-style-type: none"> <li>i) Need for R&amp;D support for the development of appropriate risk mitigation schemes in developing countries involving local authorities.</li> <li>ii) A more programmatic weather data measurement approach needs to be developed at the national and international level to facilitate the development of weather hedged instruments.</li> <li>iii) Need to advocate for the use of risk management solutions including insurance in order to bring in risk managers at the early stage of projects development.</li> <li>iv) Renewable energy manufacturers need to keep an increased share of business risks in house while still transferring volatile risks to reinsurers e.g. catastrophic risks, guarantee performance, technology risks etc..</li> </ul>	
<u>Small-scale financing</u>	<ul style="list-style-type: none"> <li>i) Need to define the right policies, financing schemes, the degree of risks that can be carried by financial and insurance institutions and the possible CDM aggregation approaches.</li> <li>ii) Need to address the risks in tranches by banks, MFIs and end-users through the use of partial credit or risk guarantees and insurance coverage (namely on the end-users side).</li> </ul>	

	<ul style="list-style-type: none"> <li>iii) There is a need to test approaches through pilot projects before scaling up the mechanisms.</li> <li>iv) Micro-insurance covers specific to renewable energy and Energy Efficiency Technologies can be developed and scaled-up in developing countries.</li> </ul>	
<u>Post 2012</u>	<ul style="list-style-type: none"> <li>i) Need for support to the design of innovative carbon finance trading tools and enhanced methodologies for carbon price discovery while looking at two time-frames: until 2012 and post 2012 (post Kyoto framework).</li> <li>ii) Contingent structures for the development of innovative tools.</li> <li>iii) Registration risk may become predominant, need for increased awareness on existing insurance products, such as registration insurance.</li> <li>iv) Feeding-in views on risk management in the climate change talks and changing the mindset about insurance.</li> </ul>	<ul style="list-style-type: none"> <li>i) Testing of voluntary carbon market schemes in developing countries.</li> </ul>
<u>Global Environment Facility (GEF)</u>	When developing PPPs, partnering companies need to be ensured of their eventual participation in the implementation of projects. This point was raised in reference to procurement procedures that are in place at the GEF.	Given the different stage of advancement of renewable energy markets (e.g. large vs. small scale); there is a need to structure and segregate programme objectives and outputs between developing and emerging economies.

### **3. UNEP commitment to mobilizing and securing investments in sustainable energy projects**

#### *Facilitating a transition towards low carbon societies*

UNEP has more than twenty years of experience working on climate change mitigation and adaptation. The Energy branch of UNEP has been working to help countries make sound policy, technology and investment choices that lead to a reduction in greenhouse gas emissions and potential co-benefits, with a focus on clean and renewable energy sources, energy efficiency and energy conservation. Strategies that UNEP has been implementing include:

- Technical and economic analyses of clean energy and low carbon technologies to help remove barriers to financing renewable and energy-efficient technologies at the national level;
- Access the Clean Development Mechanisms (CDM) through training, development and use of new methodologies for sectoral CDM projects in new areas such as land use and forestry, and undertake global analysis of the CDM to help stimulate both greater interest and increased use;
- Providing technical assistance to financial institutions in developing countries to create dedicated clean energy funds, including through links to public and private sector financiers in developed countries, and to support creation of new national public agencies that fund low-GHG investments in developing countries using;
- Advising national and local banks that are establishing lending programmes for renewable energy products in developing countries, and conducting capacity building programmes for national banks, insurance companies and others to help create or expand lending for energy efficiency investments;
- Creating and supporting professional networks and related initiatives for banks, insurers, pension funds and other financial institutions interested in supporting low-GHG investments and building on the work of the UNEP Finance Initiative.

*Public-private partnerships and cooperation programmes for the facilitation of risk management approaches in renewable energy and energy efficiency projects*

UNEP is committed to further working with the private sector to develop and implement risk management approaches that will help attract investments in the renewable energy markets of developing countries.

The UNEP programme “Assessment of financial risk management instruments for renewable energy projects”, funded by the GEF, has helped raise awareness amongst the international investment community and policy makers on the added value of risk management tools in renewable energy projects, has initiated market-oriented research projects on a co-financing basis which resulted in the launch of products and services on the markets of developing and emerging countries, and the offering of capacity building material, including training tools.

The roundtable offered UNEP the opportunity to consult with leading renewable energy market players from around the world. UNEP has gathered the relevant information for the design of a programmatic risk management approach that will lead to the implementation and enforcement of approaches in cooperation with international and domestic private and public institutions.

**ANNEX 1 – Roundtable Photos**



## ANNEX 2 –Roundtable Programme

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*Monday 13 October 2008*

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### **Roundtable on Financial Risk Management for Renewable Energy Projects**

The objective of the Roundtable is to initiate a dialogue with an opportunity for public and private representatives to examine together in an open forum how to best develop and promote adequate financial risk management mechanisms for renewable energy technologies.

Renewable Energy Technologies (RET) constitute a rapidly growing market in both developed and developing countries. This roundtable will enhance a better understanding of the market potential in developing countries and the need for appropriate financial risk management solutions, the role of both the private and public sectors in creating a stable environment for growth, the different products and approaches that have been supported by UNEP, the strategies for raising awareness on efficient financial risk management in renewable energy projects and the private-public partnerships approaches that can be developed to support the deployment of financial risk management instruments. Accordingly, discussions will center around several themes structured by five panels: four on the first day, Monday 13 October, and one last session on the second day, Tuesday 14 October.

09:45-10:00

#### **Welcome**

Sylvie Lemmet, Director, UNEP Division of Technology, Industry and Economics (DTIE), Paris

10:00-11:30

#### **Renewable energy investments: Global trends and assessing financial risks**

How are renewable energy markets growing? Who is investing? What forms are those investments taking? Which regions and countries have been the most successful in attracting and retaining investments and why? Representatives from institutional, financial and insurance sectors will respond to these questions and contribute their views on the significance of financial risk management instruments to investors and other project sponsors.

#### Moderator

Sylvie Lemmet, Director, UNEP Division of Technology, Industry and Economics (DTIE), Paris

#### Panelists

- Eric Usher, Head, Renewable Energy and Finance Unit, United Nations Environment Programme (UNEP), Paris
- Dr. Dörte Fouquet, Director, European Renewable Energies Federation (EREF), Brussels
- Dr. Armin Sandhoevel, CEO, Allianz Climate Solutions, Germany; Chairman, UNEP FI Climate Change Working Group, Geneva
- Jean-Pascal Tranié, co-founder Aloe Private Equity, France
- Nikolaus Schultze, Director, First Climate Group, Switzerland

11:30 -11:45

*Coffee break*

- 11:45 -13:00     **Enhancement of adapted insurance solutions**  
 UNEP has sponsored feasibility studies on the development of RET specific insurance products for large scale and small scale projects in developing countries. Corporate champions who have led these studies will present their findings on the challenges facing the deployment of the instruments that have been appraised and the ones that have been launched following the feasibility studies. Such instruments include global and regional reinsurance and insurance facilities for renewable energy projects.
- Moderator  
 Eric Usher, Head, Renewable Energy and Finance Unit, UNEP, Paris
- Panelists
- Jork Nitschke, Senior Underwriter, Renewable Energy and Conventional Power Plants, Divisional Unit Property, Munich Re, Germany
  - Brendan Reed , Global Portfolio Manager, Renewable Energy Codan Forsikring Nordic Construction & Engineering - Teknisk Forsikring, Royal & SunAlliance, Denmark
  - James A. Maguire, Managing Director, Asia Infrastructure Practice Marsh Inc, Hong Kong, China SAR
- 13:00 -14:00     **Lunch**
- 14:00-15:30     **Developing Alternative Risk Transfer tools and financial risk management schemes for renewable energy markets in emerging and developing countries**  
 UNEP has sponsored feasibility studies on the development of alternative risk transfer solutions, such as wind power derivatives, and financial risk management schemes for small scale renewable energy projects in developing countries. UNEP partners will talk about the challenges and opportunities identified through the studies, the developed approaches and proposed instruments. Panelists representing leading financial institutions will examine the approaches that work best.
- Moderator  
 Jens Leiding, Head of Climate Investment, Aquila Capital, Germany
- Panelists
- Salah Dhouib, Senior Underwriter, Weather Covers, Paris Re, France
  - Pradeep Chauhan, Chief Manager, Rural Risk and Policy, ICICI Bank Ltd, India
  - Chris Odamtten, Divisional Head, Financial Services, United Bank for Africa, Ghana
  - Paul van Aaslt, Director, E+Co, Netherlands
- 15:30 -15:45     *Coffee Break*



### **ANNEX 3 – List of Participants**

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Paul van AASLT, European Director, E+Co; NETHERLANDS

Christoph BALS, Executive Director, GermanWatch, GERMANY

Guilhem BOURBON, Renewable Energy Risk Management Expert; FRANCE

Hélène BOURGEOIS, Renewable Energy Risk Analyst, Marsh Finance; FRANCE

Catherine CAMARA, Manager, External communication and Investors relations, Paris Re; FRANCE

Pradeep CHAUHAN, Chief, Rural Risk and Policy Department, ICICI Bank; INDIA

Salah DHOUB, Senior Underwriter, Paris Re; FRANCE

Daan DIJK, Senior Manager Sustainable Energy and Climate, Rabobank International; NETHERLANDS

Fabrizio DONINI FERRETTI, Head of Energy, Dexia, FRANCE

Dörte FOUQUET, Partner, Kuhbier & Fouquet Law Firm; Director, European Renewables Energies Federation; BRUSSELS

Dr. Sebastian FRITZ-MORGENTHAL, International Advisory Services, Frankfurt School of Finance & Management; GERMANY

Mathieu GOUDOT, Investment Analyst, Aloe Equity Investment; FRANCE

Dirk KOHLER, Chief Executive Officer (CEO), CarbonRe; SWITZERLAND

Ben LASHKARI, Director, Head Emissions, SwissRe; UNITED KINGDOM

Emmanuel LEBLANC, Structured Finance, Renewable Energy Expert; FRANCE

Jens LEIDING, Head of Climate Investment, Aquila Capital; GERMANY

James A. MAGUIRE, Managing Director, Asia Infrastructure Practice, Marsh; HONG KONG, CHINA SAR

Marija MIRONJUK, Project Manager, Frankfurt School of Finance & Management; GERMANY

David MIZOULE, Senior Vice President - Renewable Energy & Infrastructure Finance, Rabobank International; NETHERLANDS

Jork NITCKE, Renewable Energy Team Leader, Senior Underwriter, Munich Re; GERMANY

Chris ODAMTTEN, Divisional Head, Financial Services, United Bank for Africa Ltd; GHANA

Jioty PAINULY, Senior Energy Planner, RISOE National Laboratory for Sustainable Energy; DENMARK

Michael POLLAN, Investment Manager, European Carbon Fund / European Kyoto Fund, Environnement & Infrastructures, Natixis; FRANCE

Gauthier QUERU, Senior Investment Manager, Europe, Africa & Middle East, Environnement & Infrastructures, Natixis; FRANCE

Brendan M. REED, Global Portfolio Manager, RSA Insurance / Codan Forsikring Nordic Construction & Engineering; DENMARK

Erik Jan RODENHUIS, Graduate Student - Thesis on Financial Risk Management for Renewable Energy Projects, University of Twente; NETHERLANDS

Dr. Armin SANDHOEFEL, Chief Executive Officer (CEO), Allianz Climate Solutions & Chairman - UNEP FI Climate Change Working Group; GERMANY

Ulrich SCHOPPMAYER, Senior Manager, Origination and Structuring, KfW IPEX-Bank GmbH, GERMANY

Nikolaus SCHULZE, Director, Project Finance, FirstClimate; GERMANY

Jesús TEJEDA RICARDEZ, Senior Coordinator for Mexico, Wind Action Plan and Solar on-grid PV project, Instituto de Investigaciones Eléctricas (IIE) – United Nations Environment Programme (UNEP); MEXICO

Jodie ROUSSELL, Former Chief Operating Officer (COO), American Council on Renewable Energy & Consultant, Renewable Energy Network 21 (REN21); FRANCE

Jean-Pascal TRANIE, Co Founder, Aloe Capital; FRANCE

Marie-Astrid VANBUUREN, Managing Director, Head of Alternative Risk Solutions Department, Marsh; FRANCE

Paul VEENDRICK, Manager Sustainable Energy and Climate, Division CSR, Rabobank International; NETHERLANDS

James VERNER, Renewable Energy Finance Expert, UNEP Consultant, United States of America

Jonathan YOUNG, Carbon Credit Underwriter, Munich Re; UNITED KINGDOM

Azza ZAIBI-HEMISSI, Director, Facultative Reinsurance, TunisRe; TUNISIA

