



UNEP **Finance Initiative**
Innovative financing for sustainability

A Global PPP for Climate Sustainability

www.unepfi.org

Who We Are

United Nations Environment Programme Finance Initiative

UNEP FI is a unique public-private partnership between UNEP and the global financial sector

Over 170 banks, insurers, asset managers and pension funds comprise the partnership with UNEP.

What We Do

UNEP FI develops **global standards, guidelines and best practice approaches** to sustainability for financial institutions worldwide.



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Some of UNEP FI's Activities

Working Groups	Special Projects	Regional Task Forces
<ul style="list-style-type: none">▪ Asset Management▪ Climate Change▪ Insurance▪ Property Investment▪ Sustainability Reporting	<ul style="list-style-type: none">▪ Principles for Responsible Investment▪ Biodiversity & Ecosystem Services▪ Human Rights▪ Water & Finance	<ul style="list-style-type: none">▪ Africa▪ Asia Pacific▪ Central & Eastern Europe▪ Latin America▪ North America





Principles for Responsible Investment



APRIL
27
THURSDAY

NYSE Group

- **Allianz/Dresdner**
- **Aviva**
- **AXA**
- **Bank of America**
- **Caisse des Dépôts**
- **Calvert Group**
- **DBSA**
- **Fortis**
- **HSBC**
- **Insurance Australia Group**
- **JBIC**
- **Munich Re**
- **Standard Chartered**
- **SAM**
- **Swiss Re**
- **UBS**



- COP 8, New Delhi, 2002: Climate Risk to Global Economy**
- COP 9, Milan, 2003: Emissions Trading**
- COP 10, Buenos Aires, 2004: Finance for Carbon Solutions - The CDM**
- COP 11, Montreal, 2005: The Future of Climate Policy**
- COP 12, Nairobi, 2006: Adaptation and Vulnerability**
- COP 13, Bali, 2007: Carbon Crunch**



Working Group Climate Change

Track Record CoP 9 in Milan, Italy, 2003

January 2004

 **UNEP Finance Initiative**
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CEO briefing

A document of the UNEP FI Climate Change Working Group



Purpose
In the first of a series of business-relevant opinion papers by the UNEP FI Climate Change Working Group, we explore the use of emissions trading from a financial sector perspective. The first CEO Briefing on climate change and the financial services industry offered strong support for market-based solutions to climate change including emissions trading. This paper follows up on some of the key recommendations – outlining the current political developments, explaining the manner in which companies are affected, discussing the risks and opportunities emissions trading presents, and delving into the role of financial services providers in distributing the respective risks and creating new opportunities.

Emissions Trading

Climate Change Working Group Statement

Emissions trading is an economically efficient, market-based instrument that encourages the transition to a more sustainable economy. We see domestic and regional trading as a positive first step. International trading schemes, such as the Kyoto Protocol flexible mechanisms and the European trading regime, offer the opportunity to capitalise on widely varying emission abatement costs.

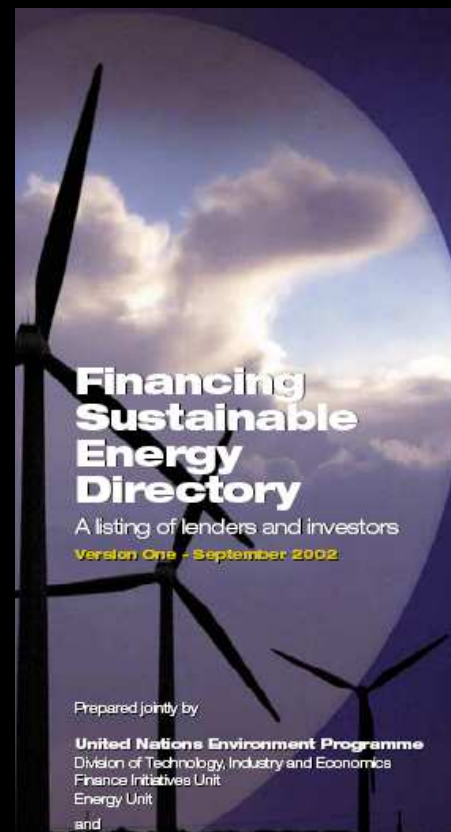
The flexible mechanisms are an effective way to reduce emissions at a lower cost, recognising that their efficiency depends largely on their design. The financial sector will play an important role in the operation of this international market and from the perspective of the financial services sector, we recommend thorough consideration of the following issues when implementing the emissions trading market.

Scope and size The successful development of an emissions trading market depends on the liquidity of the market. An international emissions trading regime requires not only a broad range of sectors but also sufficient volume to ensure an adequate diversity of contracts.

Market access Traders and financial intermediaries increase market liquidity and reduce volatility and are therefore a necessary component in an emissions trading scheme.

Market compatibility Transferability of certificates across regional and national markets, and between flexible mechanisms for example, is an important condition for market liquidity and cost efficient emissions reduction.

Emission reduction targets While such an international trading scheme, absolute emission reduction targets, as called for by the Kyoto Protocol, are an important prerequisite for credible, efficient and effective emissions trading.



Financing Sustainable Energy Directory

A listing of lenders and investors

Version One - September 2002

Prepared jointly by

United Nations Environment Programme
Division of Technology, Industry and Economics
Finance Initiatives Unit
Energy Unit
and

BASE (Basel Agency for Sustainable Energy)



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Working Group Climate Change

Track Record CoP 10 in Buenos Aires, Argentina, 2004

SEFI
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CEO briefing

A document of the UNEP FI Climate Change Working Group - June 2004

Renewable Energy

Renewable energy has to supply a greater share of the world's energy requirements. Renewables confer a number of major benefits compared to other energy pathways - energy security, a stable climate, cleaner air, and new employment opportunities - and the resources are truly vast.

It is estimated that the market for clean energy technologies could be worth \$1.0 trillion by 2020. The financial sector has a key role to play in developing and promoting this market. Renewable energy is both a solution and a business opportunity. However, there are still some significant barriers to capturing this promise. The most important thing that policymakers can do is create confidence in the long-term future of the renewables market by policies that make "the deal on the table" attractive financially.

Purpose
This study is the third in the Climate Change Working Group of the UNEP Finance Initiative. The first was a scoping paper on the role of private finance in climate change in 2002. It called for more leadership from policy-makers, facilitated by financial institutions on environmental and social issues. The second paper (2003) confirmed the sector's support for sustainable technologies as a key financial tool. This paper presents the findings of the study for financing renewable energy. It provides recommendations and mechanisms for further action.

Summary of Policy-maker Recommendations

- Adopt tough targets and schedules for the adoption of renewable energy on a rolling 15 year programme, and within a framework for the stabilisation of global GHG emission concentrations;
- Review energy policy, adopt full pricing for non-renewables in a progressive schedule, provide a tapered support programme for renewables, gradually withdraw subsidies, and simplify and clarify the regime for renewable energy projects and carbon finance;
- Align other policies, particularly transport, development, education with climate change policy;
- Keep key financial institution decision-makers well-informed about climate change and renewable energy technologies;
- Ensure multilateral and national public sector/financial institutions support the transfer to renewable technologies accordingly.

Summary of Finance Sector Recommendations

- Engage with policymakers to help develop the renewable energy sector;
- Develop an effective approach for small-scale renewables, such as "bundling" small projects, bank-track processes for small business, and support for start-ups;
- Research and develop new products and services for renewable energy financing;
- Refine assessment methodologies to cope with climate change issues;
- Raise awareness in key stakeholder groups internally;
- Re-organise internally to provide a focus on renewables;
- Improve awareness on renewable energy products and developments, particularly with the financial institutions themselves.

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A document of the UNEP FI Climate Change Working Group - January 2005

Finance for Carbon Solutions

The Clean Development Mechanism: The Financial Sector Perspective

CCWG Statement
The Kyoto Protocol's Clean Development Mechanism (CDM) is a unique instrument in international climate policy. It supports the implementation of sustainable and environmentally friendly technologies in developing countries, and helps industrialised countries meet their emission reduction obligations in a cost-effective way. The potential market size for Certified Emission Reductions (CERs) from CDM projects is remarkable: according to the European Union, an estimated annual 43) million tons of CO₂ must be reduced worldwide in order to meet the Kyoto Protocol's emission reduction target. It is hoped that a significant share of this volume will come from CDM projects. This will require, however, significant financial resources. The financial sector is often asked to play a important role in this respect, and, in particular, to provide project financing and/or insurance for CDM projects.

In practical terms, the efficiency of the CDM depends largely on its design. Although the potential market for CERs exists, the current appetite for private banks and investors to become engaged in projects is rather low. At present, the activities in the CDM market are dominated by multilateral institutions (e.g. World Bank) and national governments, which have to meet different risk/return requirements compared to private players. Clearly, the low level of private engagement is due to the specific risk structure of CDM projects, various institutional barriers, and the complexity when implementing a CDM project.

How can these barriers be overcome?
UNEP FI's CCWG recommends through consideration of four key issues:

- Simplify, standardise and streamline the CDM process in order to attract more financial institutions, a faster, more efficient and more user-friendly project registration process must be in place;
- Provide prompt and clear guidance on the CDM regulations beyond 2012 without a clear long-term framework for the CDM, it will be difficult to attract financial institutions to CDM projects;
- Foster the development of institutional CDM capacities in both host and investor countries;
- Rethink the interpretation of addititionality: the current methodology used for addititionality assessment often deters private financial institutions from engaging in the CDM.

Purpose
This study is the fourth in a series of reports by the Climate Change Working Group (CCWG) of the UNEP Finance Initiative. The first was a scoping paper on the role of climate change in 2004. The second paper (2004) confirmed the sector's support for sustainable technologies as a key financial tool. The third paper presented the business case for financing renewable energy and made policy recommendations for further action on the issue.

This fourth paper focuses on the Clean Development Mechanism and explores barriers to implementation and the role of CDM projects as seen from the financial sector perspective. Recommendations on how these barriers can be overcome are provided.

December 2007

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A document of the UNEP FI Climate Change Working Group (CCWG)

Key messages

- It is clear from climate science and economic analysis what needs to be done to combat climate change.
- Strong, early action to reduce emissions is critical and can dramatically limit the cost of addressing climate change - the benefits of strong and early action far outweigh the economic cost of not acting.
- Leading financial institutions have been supportive and creative in addressing climate change, but in general financial sector engagement is still weak.
- Stagnant policy development is delaying progress in channelling finance and investment towards effective measures addressing climate change. In particular, government finance and treasury functions need to be actively involved in this area to give policy design a harder edge: that is, not just how to reduce GHG emissions, but how to do so in sufficient volume, at lowest cost.
- To be really effective, policies need to encourage public-private sector collaboration through appropriate regulations and incentives.
- Actions must be directed at both mitigation and adaptation as climate change is already happening and developing countries will be worst affected.

CARBON CRUNCH

Meeting the cost

Recommendations

For Policy Makers

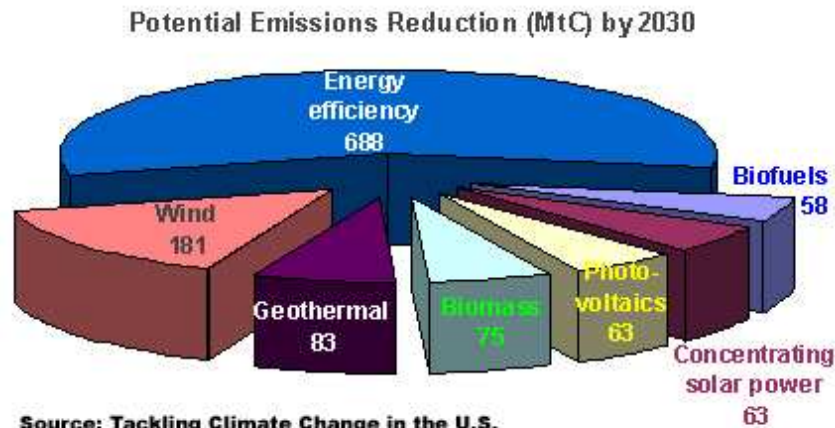
- End the uncertainty over international climate policy post-2012 through clear regulation by setting long-term emission reduction targets post-2012, especially for the critical period 2013-2030. This should be set no later than 2009.
- Ensure a systematic approach to adaptation that integrates climate change into existing and new programmes on disaster reduction/management and sustainable development.
- Involve finance and treasury functions in this area, in order to ensure the efficient use of available funds and financial mechanisms.
- Provide clear and compatible regulation of the carbon market and further globalise the carbon market to ensure its liquidity and effectiveness.
- Promote significant upscaling of R&D and investments in renewable energy and energy efficiency e.g. by setting clear targets and implementation mechanisms.

For Financial Institutions

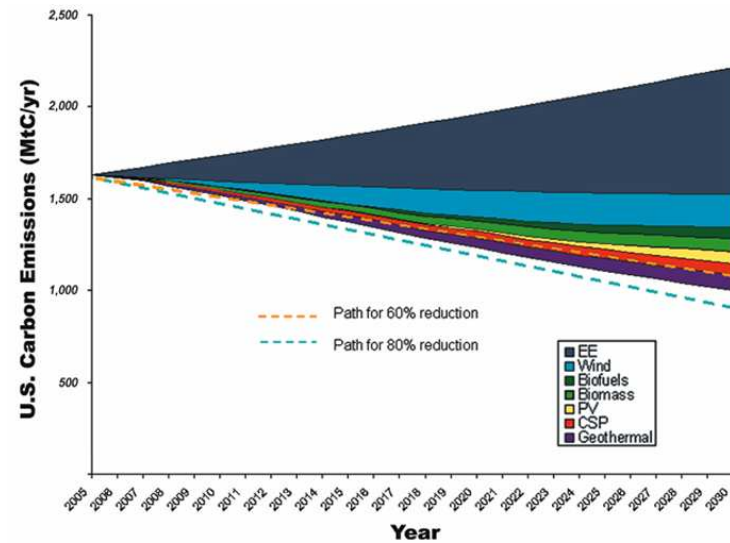
- Integrate climate change related risks and opportunities into core financial operations.
- Engage with government decision makers to optimise the allocation of available funds to combat climate change and to promote innovation and technology development at local, regional, national, and international levels of governance.
- Reduce one's own direct impacts contributing to climate change and report annual emissions transparently.



The Opportunity:



Source: Tackling Climate Change in the U.S.
<http://www.ases.org/climatechange>



Working Group

Climate Change

Next Project

CoP 15 in Poznan, Poland, 2008

The Issue: Good News

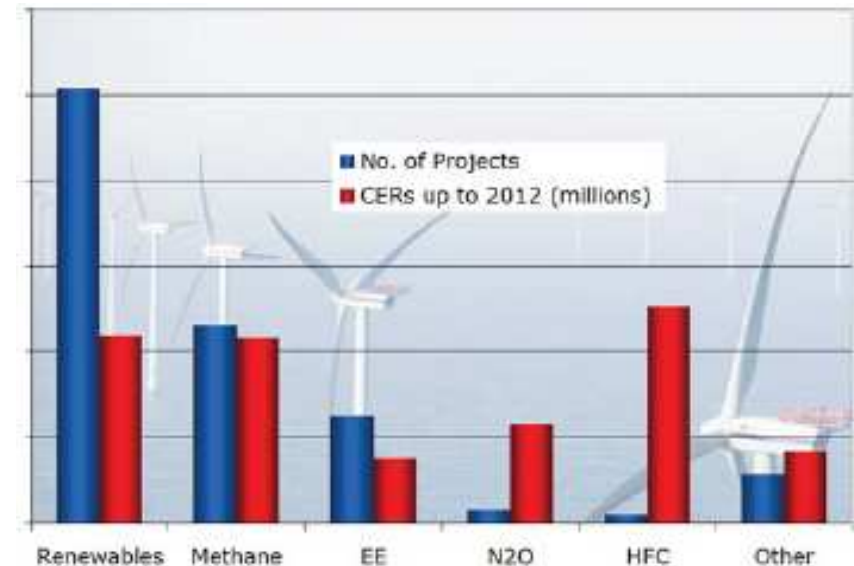
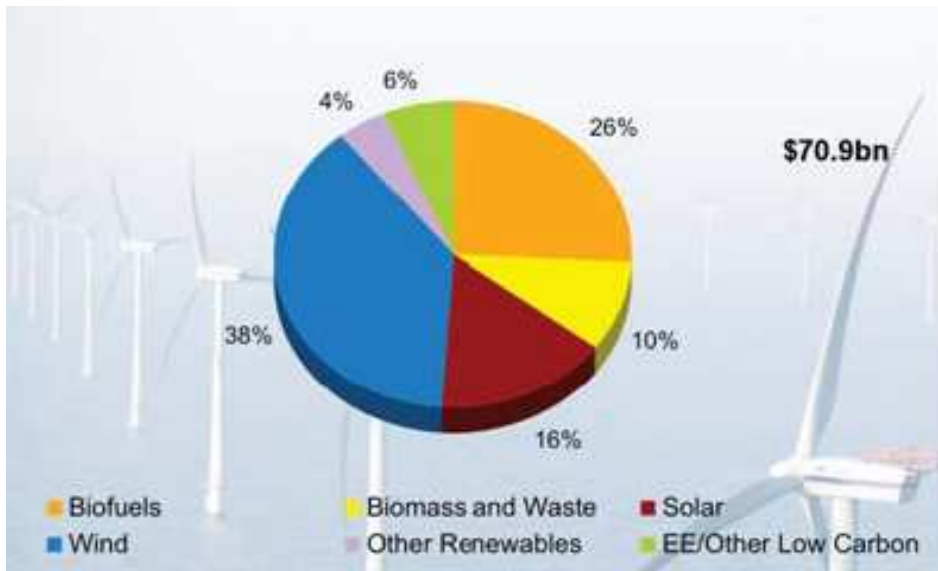
Global Investment in Sustainable Energy by Type, 2004 - 2006			
	2004	2005	2006
VC/PE	1,4	2,7	7,1
Public Markets	0,7	4,3	10,3
Govt/Corp RD&D	10,4	13	16,3
Asset Finance	11,3	22,7	27,9
Small-scale projects	3,8	7	9,3
	\$27.6bn	\$49.6bn	\$70.9bn



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The Issue: The Frowning



Source: UNEP Risoe Centre / UNFCCC Databases - New Carbon Finance



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Climate Change

CoP 15 in Poznan, Poland, 2008

The Issue: The Frowning

Technology	Investment (\$bn)	Percentage
Biofuels	4,8	15%
Biomass and Waste	3,7	11%
Solar	2,1	6%
Wind	20,4	64%
Other Renewables	1,2	4%
EE/Other Low Carbon	0,0	0%
Total	\$32.3bn (469)	

Technology	Investment (\$bn)	Percentage
Biofuels	18,2	26%
Biomass and Waste	6,8	10%
Solar	11,2	16%
Wind	27,0	38%
Other Renewables	3,1	4%
EE/Other Low Carbon	4,6	6%
Total	\$70.9bn	

Technology	Investment (\$bn)	Percentage
Biofuels	3,1	25%
Biomass and Waste	0,5	4%
Solar	5,6	46%
Wind	1,4	11%
Other Renewables	0,7	6%
EE/Other Low Carbon	1,0	8%

Technology	Investment (\$bn)	Percentage
Biofuels	2,9	34%
Biomass & Waste	0,2	2%
Solar	1,8	21%
Wind	1,4	16%
Other Renewables	0,8	9%
EE/Other Low Carbon	1,6	18%
Total	\$8.6bn (296/334)	





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Thank You!

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