

The Rising Tide at Copenhagen:

A Win-Win Solution for Industrialized and Developing Nations

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Developing Technical and Financial Solution for the Survival of Small Island States

Organized by AOSIS and CCRM

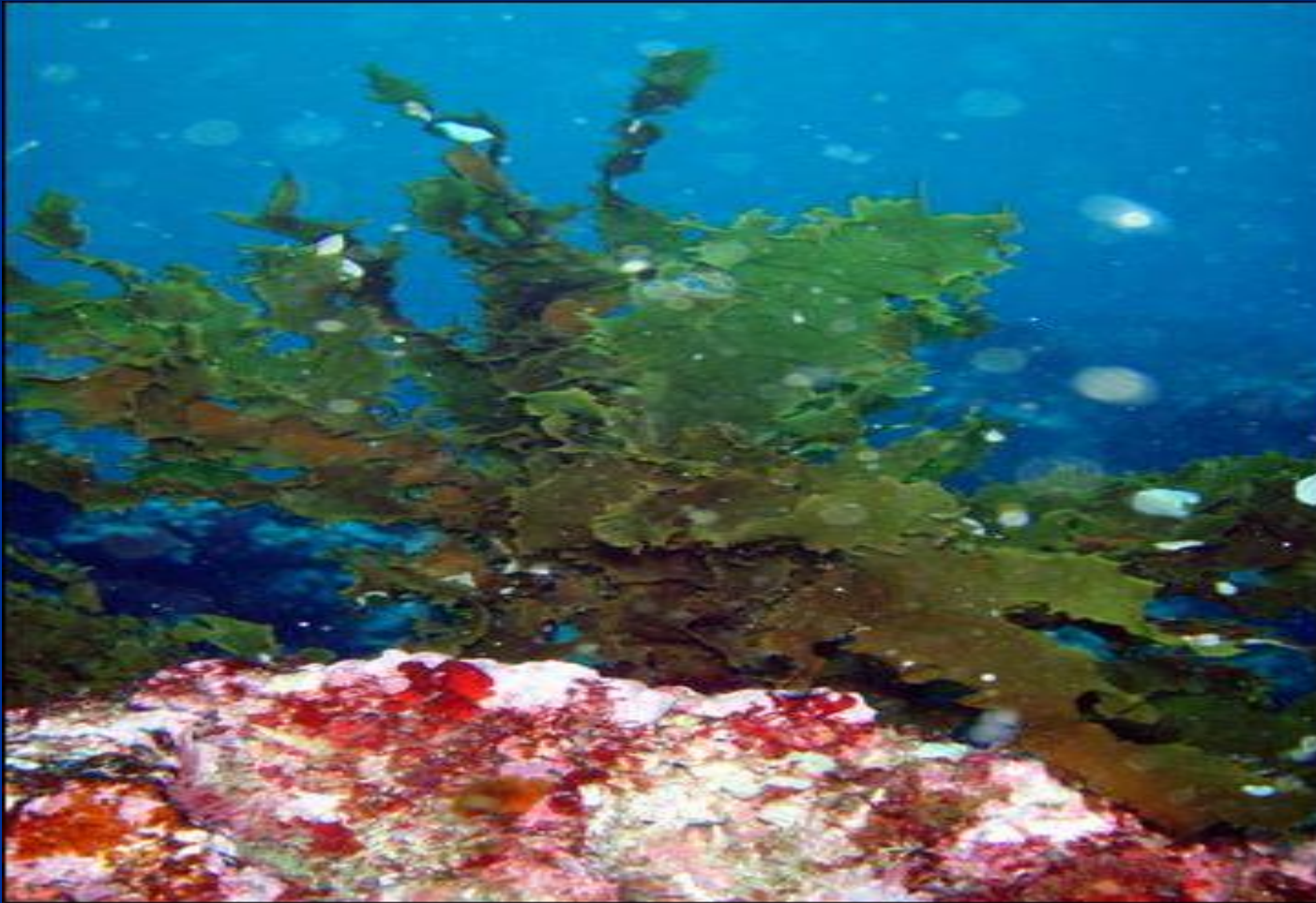
Delegates Dining Room United Nations New York

November 12 2009 1-3 pm

Disappearing



Disappearing



Outline

- The Kyoto Protocol broke New Ground
- Market Flexibility + Firm Grip on Emissions
- Terms expire in 2012
- Copenhagen: How to Move forward for Industrial and Developing Nations
- Innovative Financial & Technical Solutions
- Meeting Energy Global Needs
- Diffusing China - US Impasse

Survival of Small Islands States

The world today

- The **Kyoto Protocol** created the first global agreement on energy use, 1997
- International Law in 2005
- Industrial Nations agreed to limit their CO₂ emissions and reduced targets by 2012
- Introducing KP Carbon Market - I helped create a \$120 B/year carbon market
- \$25-35 per ton: carbon price signal -- major economic incentives for Clean Energy
- But **only a first step**

The Kyoto Protocol

- **Clean Development Mechanism (CDM)** creates major financial incentives for clean energy investment in developing nations
- \$25B in CDM projects went to developing nations so far – 20% reduction EU emissions
- China 60-80% - little to Africa, LA & SIDS
- Carbon market - the largest commodity market in the world?

Market Solution with Equity
Two sides of the Coin

The Kyoto Protocol

Only a First Step

- KP's provisions end in 2012
- Like Cinderella, it turns into a pumpkin
- By design

Additionally:

- As the USA does not participate KP lacks control on 26% of global emissions
- Lacking limits on developing nations' emissions hinders US participation
- US - China Impasse

Recent Progress in USA

- Economic incentives of Kyoto Protocol are enormous. Many in the US want part of them
- Obama wishes to ratify Kyoto
- California wants to participate in KP emissions markets – and hundreds of cities and towns
- US Supreme Court Fall 2007: Federal government can enforce emissions limits
- It is generally accepted that global businesses (e.g. automobile industry) will benefit from KP guidelines

2009 Energy Bill US House of Representatives

Future Global Needs

- Emissions Limits for Developing Nations?
- USA participation in the Kyoto Process
- A US led Climate Agreement?

The world needs more energy

To move forward in the global negotiations

Must overcome China – US Impasse

and more generally

The interests of the industrial and developing
nations are so opposed that

**Once again, we need
a two - sided coin**

Organizing Principles

A way forward that involves

- Focus on Clean Energy
- US participation
- Future Emissions Reductions by Developing Nations, China + India: Article 4 UNFCCC
- New CDM as a foundation of a major technology - driven financial investment

A win - win solution for the world economy

Two Building Blocks

- New Financial Mechanism - Modest extension of carbon market reproduces in financial terms Article 4 of UNFCCC -- while providing the equivalent of limits on developing nations emissions: diffuses China – US Impasse
- Modest extension of CDM – Provide More Energy with Negative Carbon Technology - Efficient Carbon Capture + Storage favorable to developing nations with low emissions -- Africa, LA and SIDS – 2009: Nature & Royal Academy

Blueprint for Sustainable Development

- Clean and Abundant Energy available worldwide
- Supporting sustainable growth in developing nations
- Providing a global market for industrial technology
- Transforming fossil fuels into a clean alternative
- Transition to renewable energy
- Solar thermal sources of energy that reduce atmospheric carbon concentration
- \$200 B/year Global Investment to renew \$43 trillion power plant industry worldwide (IEA)
- Private Capital underwritten by Industrial Nations

Global Energy Today

- 89% fossil – gas coal, oil
- 10% nuclear, geothermal and hydroelectric
- Less than 1% solar power – photo-volteic and solar thermal.

The Long Run

- Only renewable sources of energy will do
- Wind, Biofuels, Nuclear, Geothermal, Hydroelectric energy – all useful but in limited supply cannot replace fossil fuels
- Only solar energy can
- Less than 1% of the solar energy we receive can be transformed into 10 times the fossil fuel energy used in the world today

Long Run v. Short Run

- They require different policies
- Long run strategies do not work for the short run
- Yet any short term strategy must accelerate renewable energy
- Or will defeat long run goals

Short Run: the next 10 years

- No time to transform the entire fossil infrastructure – it costs \$43 trillion (IEA)
- Need Negative Carbon: Reduce carbon in the atmosphere now
- CSS works but does not suffice
- ‘Air capture’ and solid storage – too expensive?
- Combine air capture with solar thermal electricity: more electricity and reduce carbon

Economic Incentives

- We need economic incentives for the Short and the Long Run
- **The Next Generation Kyoto Protocol post 2012**
- Bringing aboard US and the developing nations
G77 – China and India

Innovative Financial Mechanism

- A new financial mechanism based on the carbon market – calls and puts
- Can overcome China – US Impasse
- Based on 1992 Climate Convention Article 4
- A market solution with equity
- The two sides of a coin

Blueprint for Sustainable Development

- Private/Government approach, based on industrial technology and financial markets' leadership
- Self - funded and highly profitable innovative markets – carbon credits as the 'underlying'
- Based on the Kyoto Protocol CDM - or successors
- Providing abundant Clean Energy to stave off impending Energy Crisis in developing nations
- Mutually beneficial cooperation for industrial and developing nations
- Small Island States can Increase Energy and Reduce Carbon in the Atmosphere - funded by CDM

The two sides of the coin

Copenhagen & Beyond

- Modest extension of CDM - Accreditation for Negative Carbon Technologies that make CDM investments accessible to low emissions nations
 - Africa LA & SIS - cogenerate electricity & carbon capture – CDM goal \$200 B/year
- Financial Mechanism - modest extension of carbon market can resolve Impasse on Emission Limits from Developing Nations - implementing Article 4 of the UNFCCC

AOSIS

- Active Participation & Global Leadership
- Clean Energy focus: Avert Poverty and Map Way for a safer Atmosphere

The Last Come First