

B E L L O N A P R E S E N T S

101 SOLUTIONS

C O P E N H A G E N 7 - 18 D E C 09

PROGRAM

SIDE EVENTS

T H E

BELLONA

R O O M

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THE

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ROOM

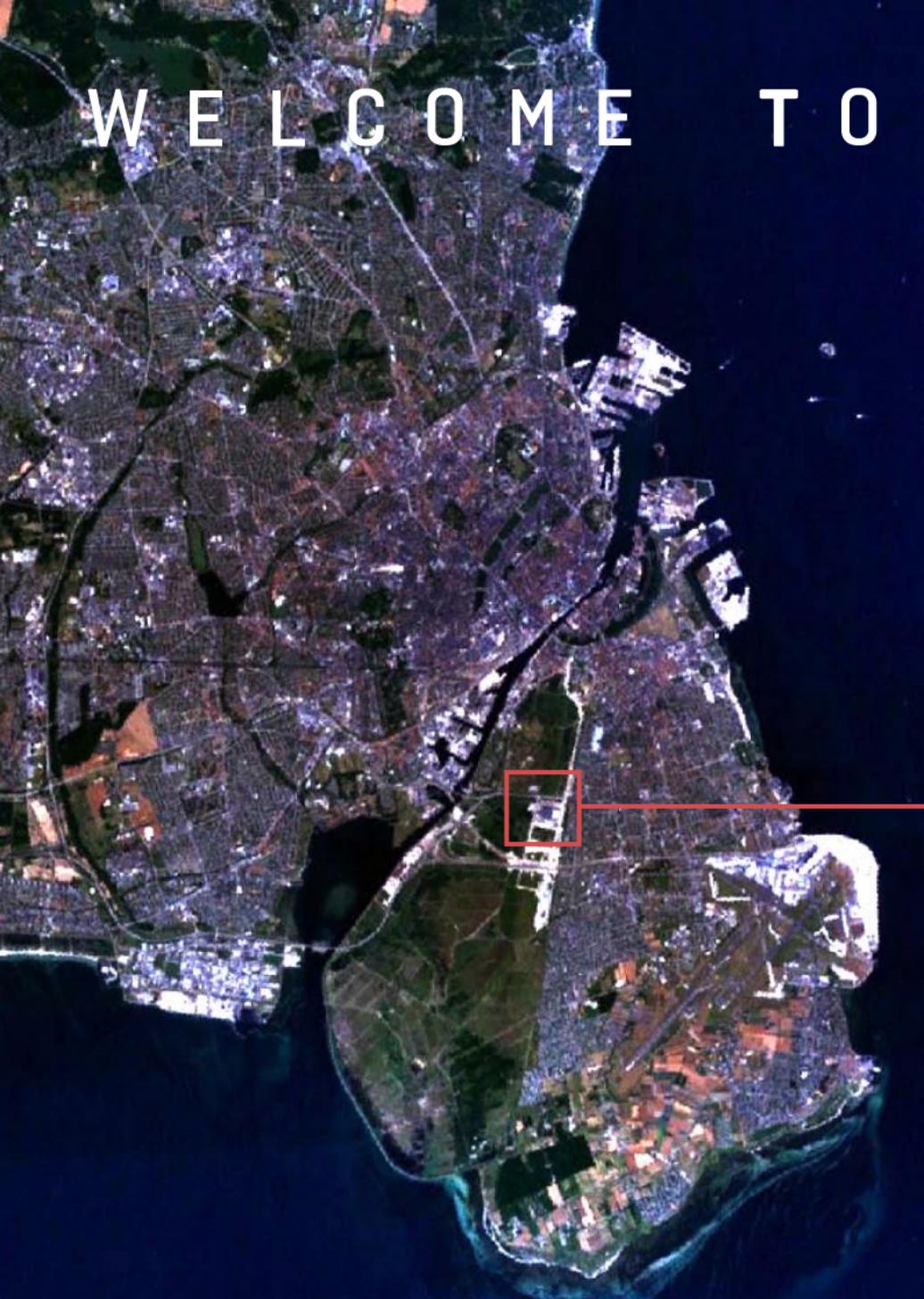
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W E L C O M E T O



MONDAY 7.DEC

11.30 - **Journalists briefing**

12.30 : **Russian climate policy**

Participants from Russia by video conference

12.30 - **CO₂ Reduction Strategies from Colorado**

13.00 :

Denver Mayor John Hickenlooper is joined by Piper Foster, Director of the Sopris Foundation and ARE-DAYS Chip Comins in a dialogue highlighting current programs, policies and best practices in the cities of Denver and Aspen to reduce and mitigate carbon.

13.00 - **UNDP -**

14.30 : **Program (tbc)**

15.00 - **Plan B for Climate Stabilization**

16.00 :

Janet Larsen, Director of Research, Earth Policy Institute. A discussion of Plan B 4.0 with examples of success stories from around the world and a call for rapid and comprehensive mobilization. Cutting CO₂ emissions 80 percent by 2020 will take a world-wide mobilization at wartime speed.

16.00 - **Global Observatory -**

17.30 : **What is COP15 all about?**

Global leaders explain the negotiations, the issues on the table, and what's at stake.

TUESDAY 8.DEC

09.00 - **101 solutions**

10.30 : **towards a carbon negative future**

This event will present a line-up of Bellona's numerous activities at COP15. Followed by reception.

Moderator: Paal Frisvold, *Bellona*

13.00 - **Most recent climate research**

14.30 :

Leading scientists present the most recent research findings about climate change.

Participants:

Pål Presterud, *Director, CICERO*

Bob Correll, *CAI*

Stein Sandven, *Bjerknes centre*

Marius Holm, *Bellona*

15.00 - **Russian Climate Policy**

16.00 :

The purpose of this event is to highlight Russias role in the climate negotiations. What is Russia's position concerning climate change and COP-15? What should be their national emission targets? What about the hot air? How can the international community influence national climate policy in Russia? Participants from Russia, Norway and the EU.

16.00 - **The Latest Science -**

17.30 : **a Report from Experts**

Co-host: *Global Observatory*



The Sahara Forest Project appears to be a very interesting example of a more integrated and holistic approach, the type that we will need a lot more of in the future to make our energy, water and industrial systems more sustainable.

Andris Pielbags,
EU's Commissioner for Energy

WEDNESDAY 9.DEC

09.00 - **American and European -**

10.00 : **Best Practices**

Piper Foster, Director of the Sopris Foundation compares American best practices to latest developments in Germany. What can Americans and Europeans learn by working together in rapidly developing carbon mitigation technology.

Co-host: *National Wildlife Federation*

10.00 - **The C-ROADS Simulator and**

11.00 : **the Climate Interactive Scoreboard**

Presenters from Sustainability Institute and MIT will demonstrate two tools to support the negotiations. The Scoreboard is an online tool that reports the evolving state of the global climate negotiations. C-ROADS is a policy-maker-oriented simulation that calculates the climate impacts in the Scoreboard. It is shared for free with all UNFCCC parties.

11.30 - **REDD**

13.00 : **Getting the safeguards right**

Will REDD proposals safeguard the rights of local and indigenous peoples? How can eligibility criteria connected to rights and governance be strengthened in the negotiating text? RFN and Accra Caucus members provide analysis and concrete proposals for the negotiations at COP 15 and beyond

Co-host: *Rainforest foundation Norway*

14.00 - **Arctic Russia -**

15.00 : **the impact of Black Carbon**

Soot emissions called black carbon; contribute to climate change in the Arctic. Russia is one of the biggest contributors. This event summarizes the latest findings, its sources and strategies to reduce emissions.

16.15 - **Biochar -**

17.45 : **delivering fast climate benefits?**

Biochar can be a promising solution for climate change mitigation and adaptation. In this event the world leading experts will discuss the potential of biochar as a fast mitigation measure.

Participants:

Dr. J. Lehmann, *University of Cornell*

D. Reed, *Executive Director IBI*

Thomas Harrtung, *Green Carbon Denmark*

Nathaniel Mulchay, *World Stoves*

18.00 - **Osmosis -**

19.30 : **Ocean energy for Europe**

Oceans and rivers provide an enormous source of renewable energy. How can Europe take a leading position in harnessing this potential?

Co-host: Statkraft,

Europe's largest renewable energy producer

THURSDAY 10.DEC

09.00 - **Press Briefing**

10.00 : **European Climate Foundation**

Press Briefing on “Innovative Financing Models”,
by Jules Kortenhorst, CEO of ECF.

10.00 - **Reducing Emissions from Deforestation**

11.30 : **Cattle Ranching in the Brazilian Amazon**

Brazil has the world’s largest commercial cattle herd, and the cattle industry is responsible for over three quarters of deforestation in Brazil, leading to around half of the country’s GHG emissions.

Participants:

Paulo Barreto, *IMAZON*

Dr. Jean Ometto, *INPE*

Steven Ripley, *FFDP*

Co-host: *National Wildlife Federation*

11.45 - **Sustainable cement**

12.45 :

The cement sector contributes about 5 percent of global carbon dioxide emissions, well ahead of other manufacturers except steel and refineries, and is expected to double its capacity by 2030 amid rapid urbanization in developing nations. This event will discuss sectoral approaches as well as recent advances in production technologies that may contribute to reduced GHG emissions.

Participants:

Howard Klee, *WBCSD*

Robert Niven, *Carbon Sense Solutions*

Tom Carter, *Calera Corporation*

13.00 - **Go electric!**

14.30 :

All-electric vehicles with competitive performance are entering the market. How can policy makers create the push and pull we need for a rapid market penetration of zero emission vehicles? Panel discussion with NGO, industry and political perspective.

Participants:

Diarmuid O'Connel, *Vice President of Business Development, Tesla Motors*

Marius Holm, *Deputy Director of the Bellona Foundation*

15.00 - **Algae -**

16.30 : **a new tool in the fight against global warming?**

In 2009 algae attracted huge investments and large headlines. Could algae be a much needed source of food, fodder and fuel? Leading scientists offer their view on the future of algae.

16.30 - **Carbon Cutting for Dummies**

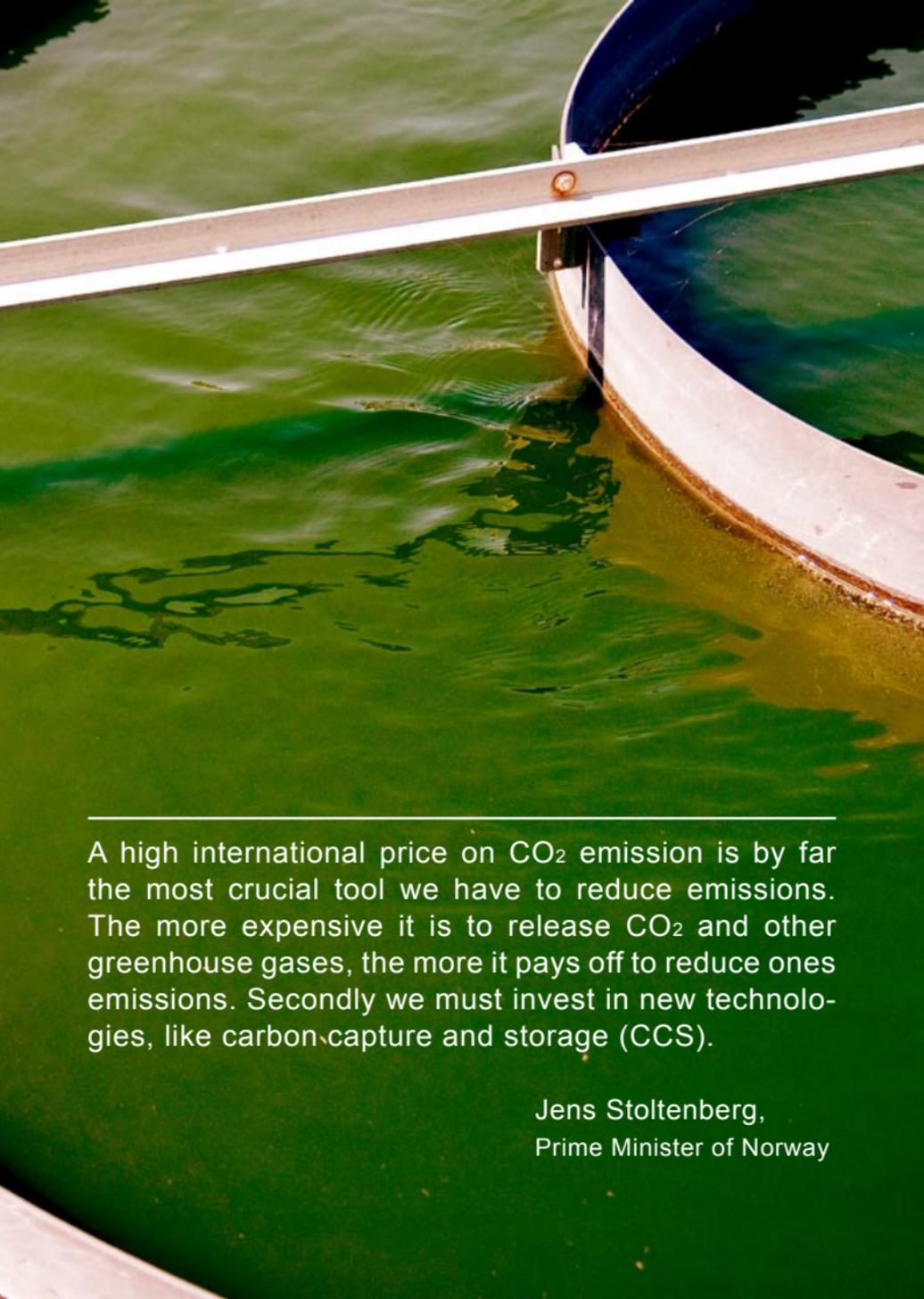
18.00 :

It's time for carbon cutting at home. Where are the areas for big impact? Experts discuss food, transportation, home energy use, and the tools to make it happen.

Co-host: *Global Observatory*

18.00 - **Closed meeting**

19.00 : **Russian NGO-briefing**

A close-up photograph of a boat's hull and a metal railing over green water. The water is a vibrant green color, and the boat's hull is white with a blue interior. A metal railing is visible in the foreground, and the water shows some ripples and reflections.

A high international price on CO₂ emission is by far the most crucial tool we have to reduce emissions. The more expensive it is to release CO₂ and other greenhouse gases, the more it pays off to reduce ones emissions. Secondly we must invest in new technologies, like carbon capture and storage (CCS).

Jens Stoltenberg,
Prime Minister of Norway

FRIDAY 11.DEC

10.00 - **Solar energy as a climate solution**

13.00 :

The solar energy potential in the world is 15 000 times larger than the global energy consumption. This event brings together politicians, NGOs and industry executives from the largest solar markets to discuss political measures and industry efforts for solar to reach its great potential in the near future.

Participants:

Ole Enger, *President of REC*

Erik Sauar, *CTO REC*

Mr. Adel El Gammal, *General Secretary, EPIA*

Ms. Alicia Montalvo,

Spanish Climate Change Bureau

Representative from Germany (tbc)

Moderator: Viktor Jakobsen, *Bellona*

Co-host: *Renewable Energy Corporation*

13.00 - **PlanetCall -**

14.30 : **Solutions from Global Youth**

Young people pitch their ideas to an expert panel including Tim Flannery.

Co-host: *Global Observatory*

15.30 - **HFCs -**

16.30 : **a mounting problem we can avoid**

Hydrofluorocarbons was a successful replacement for ozone depleting CFCs. However, HFCs are aggressive greenhouse gases. The increased use in recent years may constitute up to 30 percent of greenhouse gas emissions. In this event it will be discussed how the Montreal Protocol may solve this challenge.

Participants:

Durwood Zielke, *CIEL*

Stephen Andersen, *fmr. US EPA*

Milton Catelin, *fmr. Montreal Protocol*

Negotiator Australia (tbc)

Co-host: *CIEL*.

17.00 - **Innovations from China**

18.00 : **I Want Sustainable Innovation Movement**

Hiu Ng and Daniel Foa Co - founders and directors of 51 SIM.org discuss environmental solutions. From empowering the youth of China to actively engage in reducing carbon to making micro-loans to farmers installing methane digesters and solar panels.

19.00 - **Native Peoples - Native Homelands**

21.00 :

Tom Goldtooth from the Indigenous Environmental Network (IEN) and a delegation of Native people bring traditional perspective to climate change and solutions through indigenous values and discuss the The Mystic Lake Declaration

SATURDAY 12.DEC

15.30 - **Kids vs. Global Warming** -
17.00 : **A Youth Movement**

Alec Loorz, 15 year old youth leader and founder of Kids vs. Global Warming, is joined by Lynne Cherry, renowned environmental children's author and producer of the "Voices of the Future" series. Alec speaks about his "Declaration of Independence from Fossil Fuels".

17.00 - **My Climate Manifesto:**
18.30 : **The New Climate Writings**

Three U.S. authors of recent books on climate change will introduce and discuss their books.

Participants:

Stephen Schneider, *Stanford University*

Larry Schweiger, *National Wildlife Federation*

Bob Deans, *Natural Resources Defense Council*

18.30 - **National Security and Climate Change**
19.30 :

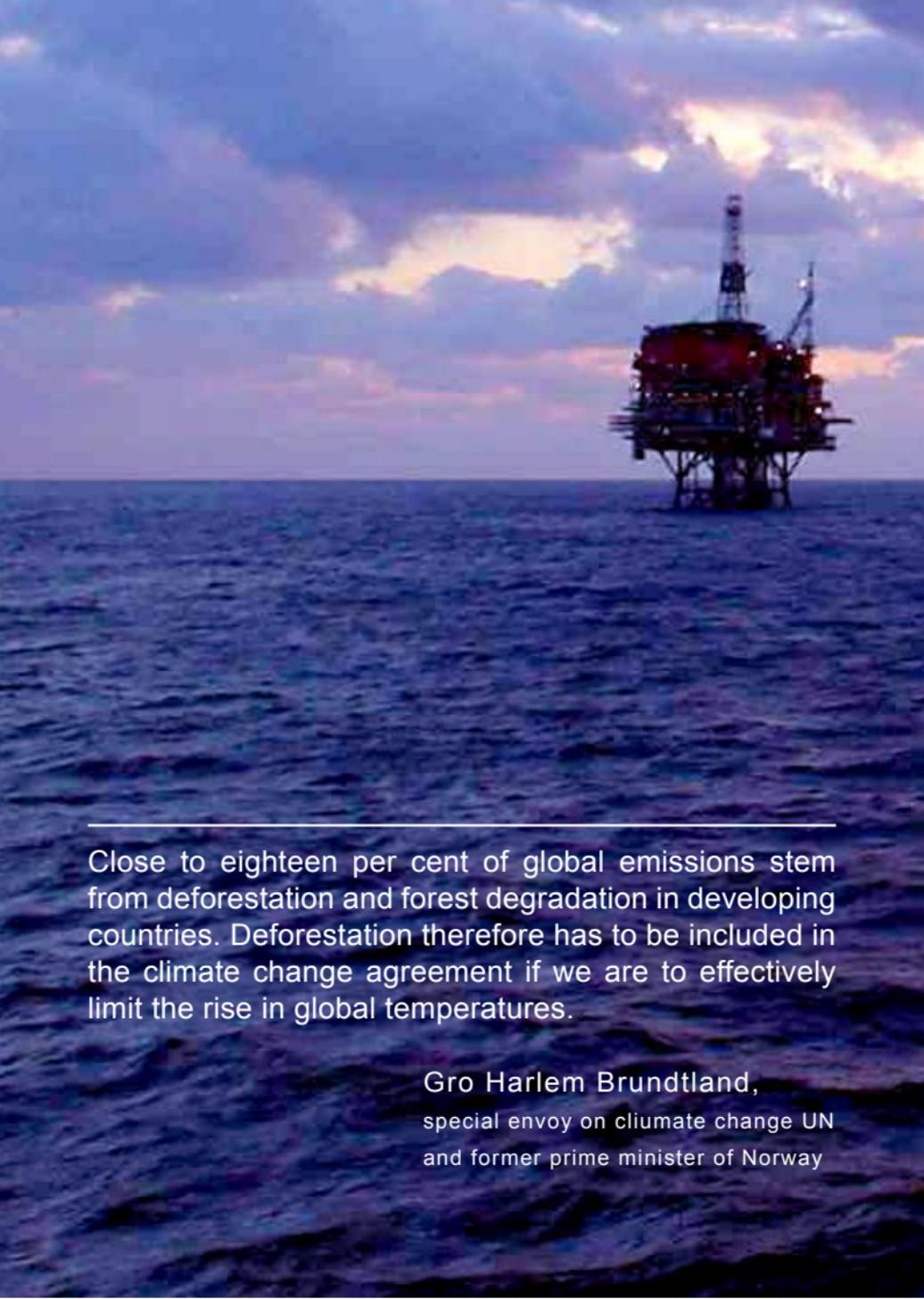
When melting glaciers and catastrophic sea level rise coupled with worsening conditions of flood, drought and massive forest fires threaten our very survival. How can a military perspective help accelerate the deployment of renewable energy as solution to the carbon crisis.

Participants:

Chip Comins *Am. Renewable Energy Day*

General Wesley Clark, *former NATO*

Supreme Allied Commander (tbc)



Close to eighteen per cent of global emissions stem from deforestation and forest degradation in developing countries. Deforestation therefore has to be included in the climate change agreement if we are to effectively limit the rise in global temperatures.

Gro Harlem Brundtland,
special envoy on climate change UN
and former prime minister of Norway

MONDAY 14.DEC

09.30 - **Communicating Sustainability**

11.00 :

Leaders from art, adventure, science, technology, and business share success stories, strategies, and missteps in the critical task of enabling public understanding of sustainability and climate change.

Participants:

Ashok Khosla, *President of IUCN*

Mattias Klum, *photographer/filmmaker
National Geographic*

Michael Hay, *IKEA Creative Director*

Co-hosts: GO and Tiera Grande

11.30 - **REDD + The Government of Norway's**

12.30 : **international climate and forest initiative**

Almost one fifth of the global climate gas emissions derive from the forest sector in developing countries. The purpose of this side event is to focus on REDD+ and its potential for emissions reductions. The side event will identify success criteria from Guyana and Brazil and discuss the way forward for REDD+.

Participants:

Erik Solheim, *Norwegian Minister of the
Environment and Inter. Development*

P.F.I. Pharo, *Dep. Dir. Government of
Norway's Climate and Forest Initiative*

Bharrat Jagdeo, *President, Guyana*

Tasso Azevedo, *Brazil*

Arild Angelsen, *CIFOR*

15.00 - **Capture and storage of CO₂ (CCS)**

17.00 : **A tool to combat climate change**

Capture and geological storage of CO₂ from heavy industry and fossil power generation can reduce 30 percent of global CO₂ emissions. It can pave way for capturing CO₂ from biomass powerplants which can lead to a net reduction in CO₂ emissions. This event will present current status of capture and storage technologies, and future plans for using CCS to remove CO₂ from the atmosphere.

Followed by reception

18.00 - **Solutions from the Amazon**

19.00 :

Governor Ana Júlia from Pará State will talk about the vision and actions in Pará for solutions for the Amazon. The chairman of the Orsa Foundation will present the views and actions of a private group and an educational model for the people of the Amazon will be presented by the Roberto Marinho Foundation.

Speakers will include:

Ana Júlia de Vasconcelos Carepa,

Governor of Pará State

Andrea Margit, *Roberto Marinho Foundation*

Sergio Amoroso, *Orsa Foundation*

Co-host: *National Wildlife Federation*

101 SOLUTIONS TO



AN INTERACTIVE EXPERIENCE
COPENHAGEN LIVE AND WORK

101 CLIMATE CHANGE



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19.00 - **The Copenhagen Climate Exercise**

21.00 :

In cooperation with the Sustainability Institute, the Bellona Foundation is hosting a role-play policy exercise in which forty youth from around the world play the role of COP15 delegates from UNFCCC parties and work to negotiate a global climate treaty. Facilitators from Sustainability Institute report the climate impacts of the proposals.

TUESDAY 15.DEC

09.00 - **Payments for Environmental Services**
10.00 : **in the State of Amazonas (Brazil)**

The event will present the results of the Bolsa Floresta Program, the first program in Brazil which rewards forest dwellers for their contribution to the fight against deforestation.

Participants:

Eduardo Braga

Governor of the State of Amazonas

Professor Virgilio Viana

Amazonas Sustainable Foundation

Manoel Cunha, NRTC

Moderator: Barbara Bramble, NWF

Co-host: *National Wildlife Federation*

10.00 - **Sahara Forest Project -**
11.30 : **enabling restorative growth**

The threat of global warming is closely linked to the lack of freshwater, food and energy. The solutions often target one specific problem. How can we benefit from a more integrated approach to the great challenges of our time?

Participants:

Michael Pawlyn, Exploration Architecture

Dr Gro Harlem Brundtland,

Special Envoy on Climate Change to UN

Frederic Hauge, Pres., *Bellona foundation*

Olav Kjørven, UNDP (tbc)

HRE Queen Rania of Jordan (tbc)

Professor Wangari Maathai,

Founder of Green Belt Movement (tbc)

11.30 - **The Moral Imperative**
12.00 : **of Climate Change**

Sally Ranney, President of Stillwater Preservation conveys an armchair conversation with AREDAY. They will discuss moral implications of not acting fast enough to preserve of the planet for future generations.

12.00 - **Systematic Neglect of Systemic Solutions?**
14.00 :

Systemic failures, such as sudden changes in climate, accelerated loss of biodiversity and rapid growth of poverty and population can only be solved by systemic solutions that address the deeper, underlying causes of these failures. At this event, leaders in development, environment, and politics will offer their view in a discussion lead by Ashok Khosla, Chairman of Development alternatives and President of IUCN and the Club of Rome

Co-hosts: Development Alternatives,
Club of Rome and IUCN

14.00 - Financing CCS deployment -
15.30 : in Developing Countries

Building demonstration projects for CO₂ capture and storage across the world needs incentives for funding and knowledge sharing. This side event will address how these criteria can be met and discuss options for financing and knowledge sharing mechanisms under future agreements.

Participants:
Iain Wright BP
Jesse Scott E3G

16.00 - Energy efficiency
17.30 : Smart Cities

More efficient energy use is needed as a solution to climate change. This event will focus on how cities can use their energy smarter. The city of Trondheim, Norway, has an ambition of becoming the world's smartest energy city. The story on how local authorities, the industry and an NGO have worked together in order to achieve the goal will be highlighted.

Participants:
Rita Ottervik, *Mayor of Trondheim*
Otto Frøseth, *Siemens' energy efficiency expert*
other speakers (tbc)
Co-hosts: *Siemens*
Moderator: Marius Holm, *Bellona*

17.30 - **Forests and**

19.00 : **The Climate Deal**

What would be acceptable and non-acceptable outcomes of the climate negotiations on major forest related issues?

Participants:

Marina Silva, *Senator and previous
Minister of the Environment of Brazil*

Leading representatives from civil
society in rainforest countries.

Co-host: *Rainforest Foundation Norway*

19.00 - **Putting a Price on Carbon-**

20.30 : **US NGOs perspectives**

Leaders of major US NGOs engaged in policies to reduce CO₂ emission and creating a clean technology future discuss strategies and solutions to solving the climate crisis at speed and scale.

Participants:

Maggie Fox,

Alliance for Climate Protection

Matt Petersen, *Global Green USA*

Larry Schweiger,

National Wildlife Federation

Bill Becker,

Presidential Climate Action Project

Frances Bienecke,

Natural Resources Defense Council

WEDNESDAY 16.DEC

09.30 - **NGO Briefing**

11.00 : **Status of US Climate Change Legislation**

A panel of experts from top U.S. non-governmental organizations will discuss the procedural status of the US climate legislation and the contents particularly relevant to the international negotiations.

Participants:

Liz Martin Perera, *Union of Concerned Scientists*

Lou Leonard, *WWF*

Michael Williams, *Blue Green Alliance*

Jeremy Symons, *NWF*

Manik Roy,

Pew Center on Global Climate Change

Moderator: Joe Mendelson, *NWF*

Co-host: *NWF*

11.15 - **Facing the Challenges: Climate change**

12.45 : **adaptation in the greater Himalayas**

The Hindu Kush-Himalayan (HKH) region is especially vulnerable to climate change. There are consequences in terms of water-related hazards, water stress and ultimately for ecosystem services, food security, and people's livelihoods. This event gives the countries in the HKH region a forum to share adaptation-related policies and strategic measures to respond to these challenges, and to solicit suggestions for a regional initiative on research needs and regional cooperation for climate change adaptation in the HKH region.

Moderator: Andreas Schild, *ICIMOD*

Co-hosts: *ICIMOD and CICERO*





We have to put our every effort into media we know to have a positive effect. I believe that the solution is wind power. We are surrounded by wind, ready for us to utilize.

Ingeborg Gjærum,
leader of Norway's Nature and Youth

13.00 - **Russian nuclear expansion**

14.00 : **and climate change**

Russia plans to rely heavily on the use of nuclear energy domestically and abroad. At the same time Russia is suffering from radioactive waste legacy of the cold war. Can nuclear energy be a part of clean energy when you look at the dimension of the problems it has created in Russia?

Participants:

Vladimir Kuznetsov, *Professor,
Vavilov Institute.*

Hussein Chechenov, *Chairman of the
Science and Education Committee
of the Russian parliament.*

Andrey Ozharovsky, *Ecodefence*

Moderator: Igor Kudrik, *Bellona*

**16.30 - Profitable Climate Solutions -
17.00 : in a National and Global Context**

Dr. Amory B. Lovins, Co-founder and Chief Scientist of the Rocky Mountain Institute via live teleconference from Aspen, Colorado discusses why there is more money to be made in saving energy than there is in producing it.

Co-host: *National Wildlife Federation*

**17.00 - Carbon Mitigation Strategies -
18.00 : Aspen and Colorado and Beyond**

A delegation of renewable energy experts from Colorado discuss how their organizations address the creation of the new energy economy and help Colorado lead the United States in clean technology development.

Participants:

Alice Madden,

Governors Climate Change Advisor ,Colorado

Nathan Ratledge,

Resource Efficiency (CORE) City of Aspen

Suzanne Farver, *Rocky Mountain Institute*

Johnny Weiss, *Solar Energy International*

Chip Comins, *AREDAY*

18.00 - Forest Society and Forest Citizenship
19.30 : in the Land of Chico Mendes

Acre is a small state in the western Amazon, which retains 88% of its forest cover and has one of the lowest rates of deforestation in the Amazon.

Governor Marques and other speakers will describe how the pressure for deforestation has been contained by building on the movement to resist forest conversion and the search for sustainable forest based solutions led by Chico Mendes.

Participants:

H.E. Binho Marques,

Governor of the State of Acre, Brazil

Other speakers (tba)

Co-host: *National Wildlife Federation*

19.30 - The Business Case -
20.30 : for Climate Solutions

Hunter Lovins, President of Natural Capitalism Solutions makes the best business case scenario for quickly transforming world-wide markets based on fossil fuels to markets based on clean technology at even greater profit.

THURSDAY 17.DEC

09.00 - **Climate models and the future:**
10.00 : **Is the 2-degree target possible?**

Human activities influence the global climate, and will continue to do so throughout the 21st century and beyond. How is it possible – and where are the limitations – for scientists to project the climate decades to centuries forward in time?

Participants:

Helge Drange, *University of Bergen*

Jens Hesselbjerg Christensen

Danish Meteorological Institute

Eystein Jansen, *Bjerknes Centre*

Co-host: Bjerknes Centre

10.30 - **Hydropower -**
12.00 : **Looking at the future role**

Only one third of the global potential of hydropower has been developed. This event will discuss key topics such as developing the global potential, the flexible role of hydropower securing stability of supply and the role of hydropower in climate mitigation.

Co-Hosts: *International Hydropower Association and Statkraft*

12.00 - **Shipping**

13.30 :

What role should maritime transport play in reducing GHG emissions? The event will discuss the division of responsibilities between IMO and UNFCCC and possible set-ups for how to include shipping in a deal in Copenhagen.

Speakers will include representatives from the maritime industry, authorities and NGO's

13.30 - **A Good Climate for Jobs**

14.30 :

At this event the Global Climate Network will launch a new report. Based on nine, national-level studies of low-carbon job creation in countries key to action on climate change the report suggests that workers stand to benefit from investment in new, climate friendly energy technology markets.

Co-hosts: *The Global Climate Network and The Ashden Awards*

15.00 - **Every Reason to Act**

16.30 :

From every vantage point climate change is both our most pressing challenge and greatest opportunity. Thought leaders speak of the connections to security, faith, business and social justice.

Co-host: *Global Observatory*

16.30 - **Fair Climate:**

18.00 : **US Constituencies Perspectives**

Today the poorest and most underserved people, communities, and countries are disproportionately burdened by the impacts of global warming and most vulnerable to poorly designed policy solutions.

Participants:

Jerome Ringo, *Apollo Alliance*

Jacqueline Patterson, *Women of Color United*

Bob Gruenig,

National Tribal Environment Council

John Grant, *100 Black Men of Atlanta*

Moderator- Joe Mendelson, NWF

18.00 - **Global Faith Leaders**

19.00 :

Senior faith leaders from some of the most vulnerable developing countries will be joined by those from the United States to discuss both the need for international adaptation funding and why major religious communities say such funding is essential to their support of climate policies.

Participants:

Rev. Jim Ball, *EEN*

Walt Grazer, *National Religious -
Partnership for the Environment*

Sanjeev Bhanja, *India CR*

Oswaldo Munguia, *MOPAWI, Honduras*

H.E. Msgr. Joao Silota, *Mozambique*

H.E. Msgr. G. Rodriguez Vega, *Africa*

19.00 - **Climate Finance**
20.30 : **in a Time of Austerity**

In spite of the economic crisis, it is still possible to have climate financing; a money flow from developed to developing countries. This session will feature preliminary results from a new Global Climate Network report featuring examples of policies and actions that would be financed and some thoughtful proposals on how climate finance can be framed politically.

Co-hosts: *The Global Climate Network*
and *The Ashden Awards*

FRIDAY 18.DEC

09.00 - **The C-ROADS Simulator and**
11.00 : **the Climate Interactive Scoreboard**

See page 10

11.00 - **Beyond Copenhagen:**
12.30 : **Getting it Done!**

There is no need to wait. As the talks wrap up, it's time to accelerate impact and scale up solutions. Opportunities are everywhere. Local governments, businesses, communities and individuals are showing how to get it done.

Co-host: *Global Observatory*

12.30 - **Next Steps for US Leadership**
14.00 :

Bill Becker, Director of the Presidential Climate Action Project discusses next steps for President Obama in a post-Copenhagen world. The PCAP document was delivered to President Obama outlining what must be done in the first year of taking office to mitigate the worst effects of climate change. PCAP is a roadmap to long term sustainability for America and the world.

Participants:

Bill Becker, *Director of PCAP*

David Orr, *Professor from Oberlin College*

Bill McKibben, *Middlebury College Professor and Founder of 350.org*

Chip Comins *AREDAY*



Day In the Carbon Night

When you leave the room,
Turn off the light

When you sit down to eat,
Just do what's right.

That is, just take what you can consume
And don't be led by the volume sight.

For score of persons slaved
To create this food, working through the night,

Often not being able to consume it themselves
Since they do not live in the financial bright light.

Carbon-planted and carbon-harvested
Carbon-picked and carbon-shipped.

So when you leave the room
Turn off the light,

Otherwise, carbon will have a feast
And even in the day,
you and I will be stuck in the night.

Dessima M. Williams
Negotiation leader for the island states

BELLONA

