CLIMATE CHANGE: WORLD SUMMIT OF REGIONS 2008

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This briefing gives an overview of the first World Summit of Regions on Climate Change. The Summit was held in Saint Malo, France, and was attended by a member of the Scottish Parliament's Transport, Infrastructure and Climate Change Committee. The Briefing also looks at Scotland's involvement in regional climate change initiatives.

Figure 1 – World Summit of Regions was held in Saint-Malo, France



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BACKGROUND

The inaugural World Summit of Regions - Climate Change: Regions in Action was held in Saint Malo, France on 29-30 October 2008 under the auspices of the Network of Regions for Sustainable Development (NRG4SD) and the Conference of Peripheral Maritime Regions of Europe and incorporated agreements between regions, regional networks, and the United Nations. The Network of Regions was launched during the 2002 World Summit on Sustainable Development in Johannesburg and aims "to be a voice for, and to represent regional governments at the global level, promoting sustainable development and partnerships at the regional level around the world". Wales is the Vice-Chair for Europe.

The World Summit of Regions sought to do a number of things including:

- Presenting regional examples of the impacts of climate change, and regional activities to reduce greenhouse gas emissions and adapt to those impacts
- Exploring the reasons for which climate change issues are of direct interest to the regional tier
- Exploring the reasons for which the regional tier is particularly entitled to take action in the area of climate change
- Exploring the reasons for which the regional tier presents an "added value" that is complementary to State level and sub-regional level
- Providing a platform for the signing of agreements between regions, and associations of regional governments.

On 7 October 2008 the Scottish Parliament Transport, Infrastructure and Climate Change Committee (2008) <u>agreed</u> to send Cathy Peattie MSP, Deputy Convener of the Committee, to the World Summit, together with an environment researcher from SPICe. The Scottish Government was not represented, but is involved in other regional climate change initiatives, as outlined later.

The Summit concluded with an agreement to meet again in Uruguay in 2010. Furthermore a number of agreements, including the Saint Malo Declaration, were signed between the United Nations, regions and regional networks around the world. More information on these is available on page 5.

WHY REGIONS?

In plenary session, Jean Jouzel, the Vice President of the Inter Governmental panel on Climate Change <u>reiterated</u> (World Summit of Regions 2008a) that "warming of the climate system is unequivocal". Climate change targets, and broad policy can be set at international, state or regional level. However, the implementation of actions to deliver cuts in greenhouse gas emissions, or adaptation to the effects of climate change, must take place at a more local level.

The <u>UN Human Development Report 2007/2008</u> (United Nations Development Programme 2008) recognised that:

Climate Change is global but the effects will be local. Physical impacts will be determined by geography and microlevel interactions between global warming and existing weather patterns. The immense scope of these impacts makes generalisation difficult [....] however, five specific risk-multipliers for human development reversals can be identified:

- 1. Reduced agricultural productivity
- 2. Heightened water insecurity

- 3. Increased exposure to coastal flooding and extreme weather events
- 4. The collapse of ecosystems
- 5. Increased health risks

The definition of "regions" varies across the world. For instance in the European Union, the <u>Committee of Regions</u> gives examples of regions as Wallonia, Scotland and Wales, as well as much smaller entities such as county councils. In some countries outwith Europe, regions can also be based on the local authority structure to be found in, for example, Namibia, where a population of around 2 million is governed by central government, regional government and local authorities. The Namibian Government is beginning to recognise that it is important to roll out the decentralisation of decision taking to combat the effects of climate change.

Scotland and "regional" climate change initiatives

Scotland's involvement in 'regional' climate change initiatives of this type focus on commitments under the <u>States and Regions Climate Alliance</u> (The Climate Group 2008), administered by the <u>Climate Group</u>. Sao Paulo, one of the other participants in this Alliance is one of the new coconvenors of NRG4SD. Scotland is not a member of NRG4SD, however Argyll & Bute, Highland and South of Scotland are all members of the Conference of Peripheral Maritime Regions of Europe.

Scotland is also involved in <u>Clim-ATIC</u>, another international project part funded by the European Commission's Northern Periphery Programme. Involving Sweden, Finland, Norway and Greenland, the parts of Scotland involved are the Cairngorms, and Glen Urquhart and Drumnadrochit area. The idea of the project is to explore the potential for different community sectors to develop climate change adaptation capacity, and deliver real adaptations that will provide local economic and social advantages. Another regional organisation taking an active interest in climate change, the Council of European Municipalities and Regions, does not have Scottish representation (the England & Wales representing <u>Local Government Association</u> is a member).

NORTH - SOUTH COLLABORATION

Indicators of human well-being tend to favour states in the northern hemisphere. This is the case whether considering absolute figures such as life expectancy or access to healthcare and water, or using tools designed to measure the well-being of an area, such as GDP. Those countries which do better in these indices are invariably those which produce the vast majority of greenhouse gases, as the map below illustrates, showing country's sizes relative to their carbon dioxide emissions.

United States
6.0 Gt CO₂

China
5.0 Gt CO₂

China
4.0 Gt CO₂

Japan
1.3 Gt CO₂

North Africa 0.5 Gt CO.

Sub-Saharan Africa 0.7 Gt CO, India

1.3 Gt CO.

World total

29.0 Gt CO.

Figure 2 – Mapping the Global Variation in carbon dioxide emissions

Source: <u>UN Human Development Report 2007/2008 quoting source of the map as Mapping Worlds 2007</u> (United Nations Development Programme 2008).

It is those who are already vulnerable, the world's poor, who are increasingly on the receiving end of the consequences of climate change. In plenary session at the World Summit, Jean Jouzel <u>stated</u> (World Summit of Regions 2008a) that the populations most vulnerable to the impacts of climate change are those that are already vulnerable. He said that:

The poor have limited adaptive capacities and are more dependent on climate-sensitive resources. Vulnerability in Africa, Asia and Latin America is aggravated by other multiple stresses. Within other areas, the poor, marginalised communities and the elderly are particularly at risk.

All this means that international deliberations on climate change, and sustainable development more generally, tend to refer to "north-south" relationships — this refers to, for example, knowledge transfer between developed countries in the northern hemisphere and developing countries in the southern hemisphere. Pleas were made, however, at the World Summit for acceptance that interaction between southern hemisphere nations or regions is just as important.

EXAMPLES OF REGIONAL IMPACTS OF CLIMATE CHANGE

The following examples of the impacts of climate change were presented at the Summit¹, together with examples of actions being taken to deal with these impacts, and to reduce emissions of greenhouse gases.

Khulna (Bangladesh)

Latin America

Energy-related CO, emissions, 2004 (Gt CO,)

The size of this square equals 1 Gt CO_

Each country's size is relative to its annual CO, emissions

1.4 Gt CO,

Bangladesh is typical of a country where the citizens contribute, in relative terms, a small amount to the problem of climate change, but have to deal with an overwhelming amount of the

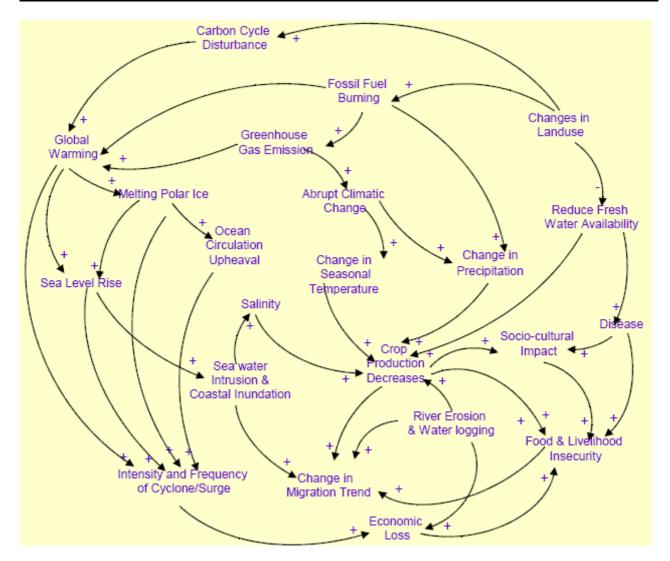
¹ The presentations are available <u>online</u> though these summaries also draw on what was actually said during the presentations

consequences. Khulna Division is one of the six divisions of Bangladesh, and is located in the south-west of the country. It has a population of almost 30 million. Khulna is experiencing:

- More flooding events and in particular flash floods
- More rain
- More droughts
- An earlier monsoon season
- Increased intrusion of saline water
- Rise in sea level
- More danger from cyclones and tidal surges
- Increased river erosion

The diagram below shows the interaction of these impacts, and their causes:

Figure 3: Interactions between climate impacts and adaptation policy in Bangladesh



More on climate change in Bangladesh can be found in the <u>presentation</u> (World Summit of Regions 2008c) delivered at the Summit (World Summit of Regions 2008c), and on the website of the <u>Network on Climate Change – Bangladesh</u>. A local Non Governmental Organisation, <u>Prodipan</u>, is working towards organising the poor and supporting their efforts towards human and economic empowerment with special emphasis on gender and environmental needs.

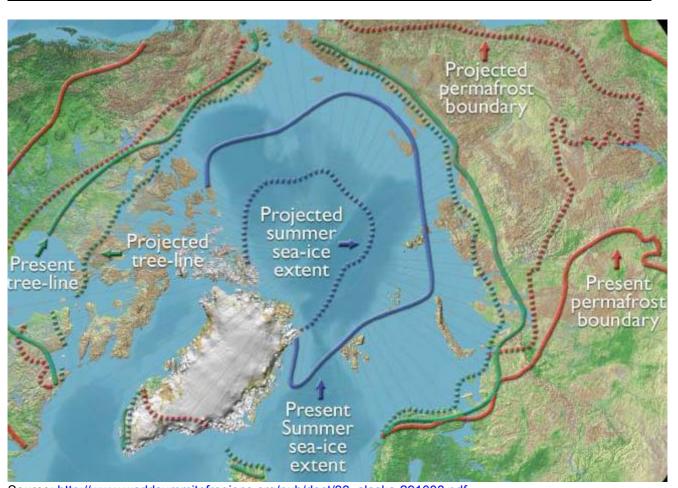
Alaska (United States of America)

Alaska is experiencing dramatic and increasing threats from the changing climate.

- Only 42% of Arctic tundra is stable. Of 300 villages in Alaska, 121 of them will have to relocate in the next 10-15 years
- The permafrost is thawing, with the danger of methane, a potent greenhouse gas, being released to the atmosphere
- The habitats of the polar bear, and other animals such as the beluga whales, are under intense threat
- One example given at the Summit was of parts of the ground under and around the Trans Alaskan oil pipeline being kept frozen artificially to avoid damage due to unstable ground

Figure three below shows the present and projected Arctic summer sea ice, tree-line and permafrost extent.

Figure Four – Present and projected summer sea ice, tree-line and permafrost extent



Source: http://www.worldsummitofregions.org/pub/doct/38_alaska-291008.pdf

More on impacts of Climate Change on the Arctic area can be found in <u>Impacts of a Warming Arctic</u> (Arctic Climate Impact Assessment 2008) and in the Alaska <u>presentation</u> (World Summit of Regions 2008d), delivered at the Summit.

EXAMPLE OF REGIONAL ACTION TO REDUCE GREENHOUSE GAS EMISSIONS

Catalonia (Spain)

The <u>Catalan Office of Climate Change</u> leads on co-ordinating activities in the Spanish region of Catalonia. Their <u>presentation</u> (World Summit of Regions 2008e) at the summit set out a number of initiatives being taken forward in the region.

On 30 September 2008 the Catalan Mitigation Action Plan 2008-2012 was approved by the Government of Catalonia. The Action Plan has the mission of "co-ordinating monitoring and promoting sectoral policies, plans, actions and policies which will have a direct and indirect impact on emission reduction". The Plan has 4 key programmes:

- 1. Emissions reduction in those sectors not covered by the European Emissions Trading Scheme
- 2. Promotion of emission reduction in plants covered by the European Emissions Trading Scheme
- 3. Cross-departmental actions for mitigation
- 4. Sector specific support measures

The Office is also developing work on adaptation, including:

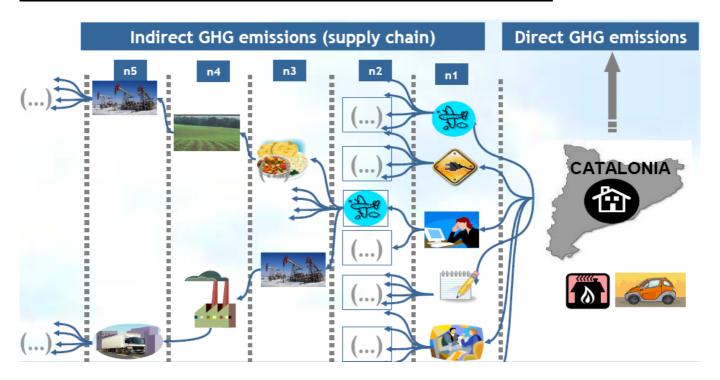
- 2nd edition of report on climate change impacts in Catalonia
- Forecasting climate change effects in the River Ebro delta (the River Ebro has the greatest discharge of any Iberian river, and is the longest in Spain)
- Establishment of a Laboratory of Research on Climate

Catalonia has an ongoing line of communication with the Spanish Government, including through the co-ordination of policies through technical committees. Perhaps of more significance, Catalonia has a seat at the table in the Spanish delegation to international climate change negotiations, and so will be formally represented at the next United Nations Climate Change Conference, known as COP/CMP 14, in Poznań, Poland, in early December 2008².

The Office is carrying out a study on a consumption based approach to measuring greenhouse gas emissions, that is taking into account the emissions from activities which take place abroad, but which provide goods or services for Catalonia, as well as those emissions which originate from the land mass of Catalonia. The basis of this theory is illustrated below:

² The Conference of the Parties (COP) serves as the meeting of the Parties to the Kyoto Protocol. This is referred to as the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP)

Figure 5 – Direct and indirect greenhouse gas emissions for Catalonia



EXAMPLES OF REGIONAL ADAPTATION TO CLIMATE CHANGE

Sahara and Sahel (Africa)

The North Western Sahara Aquifer System is a transboundary resource shared by Algeria, Tunisia and Libya. Covering over one million square km, abstractions from the system have tripled over the last 20 years. This has led to an increased risk of a number of issues:

- Increased friction between the countries concerned
- Depletion of the natural resource
- Water salinisation

Algeria, Tunisia and Libya have recognised these risks and sought to work together, basing their work on a scientific analysis of the situation, and under the auspices of the <u>Sahara and Sahel Observatory</u>, an organisation founded in 1992 to improve early warning and monitoring systems for agriculture, food security and drought in Africa. Scientific co-operation has led to a more formal institutional framework for the management of shared water resources among the three countries.

The <u>presentation</u> at the World Summit explained that the North Western Sahara Aquifer System Coordination Unit now has a role to (World Summit of Regions 2008f):

- Support the countries in implementing the main technical activities associated with managing the shared aquifer network
- Energise the inter-institutional process by identifying the main transboundary water resources challenges, formulating proposed solutions, and formalising consensus and consent

• Ensure high level discussion amongst decision makers, and promoting participation at a more local level

Initial outcomes from the work undertaken in the region include a shared agreement that there is a need to:

- Promote the more efficient use of water, and seek a more efficient water allocation system
- Consider the management of irrigation in the area
- Diversify regional economic activity to best use the water resource
- Ensure urban development integrates water scarcity and guarantees its sustainability
- Consider an economic investigation into water transfer to high demand areas
- Consider non conventional water resources (treated used water and drainage water)

Kaunas (Lithuania)

The Kaunas region of Lithuania was one of the few regions to send a health professional to the World Summit. However, the <u>formal contribution</u> from Kaunas focused on forestry (World Summit of Regions 2008g). The Kaunas region is experiencing the evidence of climate change, for instance:

- An average temperature rise of almost a degree
- Milder winters with less snow cover
- Shorter spring
- Severe droughts in summer
- Longer and warmer autumn
- More frequent extreme weather events

Effects of these changes are, or are anticipated to be:

- Changes in vegetation growth and phenology (when natural processes happen in an annual cycle)
- Decline in forestry condition
- More frequent wildfires and higher winds
- More frequent outbreaks of pests and disease
- Disappearance of some native species

The Kaunas region is seeking to ensure its forestry has an inbuilt resilience to the effects of climate change, and now has a development strategy on adapting forestry to climate change. Forest restoration, and afforestation are key to this, as are methods of sliviculture, for instance site and species selection. Measures are also being taken to try and reduce fire and the risk from more falls of trees due to high winds.

DECLARATIONS AND AGREEMENTS

Various agreements were reached and partnerships were established at the World Summit of Regions. These are outlined below:

The St Malo Declaration

The <u>Saint Malo Declaration</u> (World Summit of Regions 2008b) was signed on 30 October 2008. The Declaration:

- Reaffirms that the scope of regional action is critical and necessary [....] particularly in relationship to mitigation and adaptation measures and policies to tackle climate change
- Recognises that Regional Governments have wide policy and implementation competencies related to activities and sectors such as energy, transport, industry, agriculture, land use and resource management, which are mainly responsible for the anthropogenic greenhouse gases
- Calls for Heads of signatory parties [to global climate change agreements], other world leaders and the United Nations itself to recognise and support the necessary, essential and complementary role of Regional Governments in the [....] efficient response to climate change
- Calls for any agreement made at the international agreements to be discussed at Copenhagen in 2009 to make explicit recognition of Regional Governments.

The Declaration was signed by 20 regions from Africa, Asia, South America and Europe:

- 1. Aragon (Spain)
- 2. Basque Country (Spain)
- 3. Brittany (France)
- 4. Canarias (Spain)
- 5. Cantabria (Spain)
- 6. Catalonia (Spain)
- 7. Flanders (Belgium)
- 8. Intendencia de Canelones (Uruguay)
- 9. Kaunas (Lithuania)
- 10. Mbale (Uganda)
- 11. North Sumatera (Indonesia)
- 12. Prodipan (Bangladesh NGO)
- 13. Reunion (France)
- 14. Sante Fe (Argentina)
- 15. Sao Paulo (Brazil))
- 16. Sofala (Mozambique)
- 17. Tuscany (Italy)
- 18. Wales (United Kingdom)
- 19. Wallonia (Belgium)
- 20. Western Cape (South Africa)

In addition, the declaration was witnessed by representatives of eight associations of regional governments including from South America, the <u>Northern Forum</u> and the <u>Conference of Peripheral Maritime Regions of Europe</u>.

Other agreements and launches at the World Summit

- The pilot phase of a new partnership initiative between the United Nations³ and regions both from industrialised countries and emerging and developing countries was launched at the World Summit. "Towards carbon neutral and climate change resilient territories" will see the UN develop the capacities of regions in developing countries to design and implement climate change strategies and action plans. The UN agreement is with various Associations of Regions from around the world
- An agreement was signed to site **Climsat**, a new United Nations satellite and mapping service centre focusing on climate change at regional level, in Brest, Brittany
- The **European Environment Agency** (2008) released its latest report at the Summit. Impacts of Europe's changing climate 2008 indicator-based assessment points to the danger for Europe of "ncreasing temperatures, changing precipitation, rising sea level, more intense and frequent extreme weather events and melting glaciers, ice sheets and Arctic sea ice" as some of the impacts of global climate change.

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³ Specifically the United Nations Development Programme and United Nations Environment Programme

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