

First US - European Conference of Metropolitan Regions and Areas

Sharing Knowledge and Developing Joint Action to Address Climate Change

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Mitigation Measures and Subsidiarity

Updated to take account of the IPCC 4th Report on mitigation measures and policies

EUCO2 80/50 Interreg IVC project - European metropolitan climate change/urban change



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Mitigation measures and subsidiarity

International - metropolitan advocacy

Foresight

- 1 UN Framework Convention on Climate Change (Kyoto Protocol+)
- 2 EU Carbon Trading Scheme
- 3 Contraction and Convergence

Supply

- 1 Carbon capture and sequestration research and development
- 2 Clean coal technology and development (EU project)
- 3 Hydrogen economy research and development
- 4 Fusion/fission research
- 5 Bio-fuels (carbon-neutral biomass)

Demand

- 1 Carbon pricing - the EU CTS (Carbon Trading Scheme)
- 2 Industry and commerce in the EU CTS
- 3 Surface transport in the EU CTS
- 4 Aviation in the EU CTS
- 5 Maritime transport in the EU CTS
- 6 Product standards - emissions, efficiency and recycling
- 7 EU vehicle manufacture fuel efficiency/emission agreements
- 8 Short haul aviation (under 400km) to high speed trains
- 9 Carbon off setting?

National - metropolitan advocacy and action

Foresight

- 1 EU Carbon Trading Scheme
- 2 EU Energy and Climate Change targets
- 3 National climate change strategies - mitigation and adaption
- 4 Support for process specific mitigation technologies for GHG emitting industries (for example, cement, ammonia, iron and aluminium)
- 5 Support for crop and grazing land management to increase soil carbon storage and minimise emissions
- 6 Support for peat soil restoration
- 7 Support for forestation, reforestation and forest management
- 8 Support for dedicated energy crops (for example, forestry)

Supply

- 1 Energy supply and distribution efficiency (for example, electricity grids)
- 2 Support for the development of renewable energy sources - wind, solar, geothermal, hydro
- 3 Renewables obligations for suppliers (UK 20%)
- 4 Support for of micro-renewable energy sources
- 5 Support for carbon capture and storage (CCS)
- 6 Support for a hydrogen energy supply system - using gas or electrolysis (hydrogen gas supply system for heating and transport)
- 7 Substitute natural gas for coal in power stations
- 8 Consider nuclear power

Demand

- 1 Feed-in tariffs for renewable energy
- 2 Taxes on fossil fuels
- 3 Building Regulations - energy and water efficiency
- 4 Building Regulations - CO2 zero homes and buildings
- 5 Energy efficiency - improved metering and billing
- 6 Home insulation programmes
- 7 Short haul aviation (under 400km) to high speed trains
- 8 Renewable transport fuel obligations (RFTO) - bio-fuels/hydrogen
- 9 Public transport powered from renewable energy sources
- 10 Vehicle taxation to promote emission reductions
- 11 Traffic management and road pricing
- 12 Personal carbon rationing
- 13 Public procurement policies (awareness raising)

Metropolitan - action

Foresight

- 1 Metropolitan vulnerability to climate change - adaptation
- 2 Metropolitan contribution to climate change - mitigation
- 3 Green house gas emissions assessments and inventories
- 4 Green house gas emission reduction scenarios
- 5 Low or zero carbon metropolitan vision
- 6 Integrated metropolitan strategy - including adaption and mitigation
- 7 Awareness raising and stakeholder involvement

Supply

- 1 Renewable energy supply sources
- 2 Micro-renewable energy sources - hydrogen fuel cells and CHP
- 3 Combined heat and power (CHP) - developer obligations
- 4 Micro-renewable energy sources - solar and wind
- 5 Waste to heat and power generation

Demand

- 1 Reducing the need to travel - centres and multi purpose journeys
- 2 Reducing the need to travel - location and linkage of traffic generators
- 3 Reducing the need to travel - higher density, mixed use urban form
- 4 Enabling walking and cycling - metropolitan networks
- 5 Integrated public transport - connectivity and accessibility
- 6 Integrated freight transport - connectivity and accessibility
- 7 Traffic management and road pricing
- 8 Public transport management and dedicated routes
- 9 Public transport powered from renewable energy sources
- 10 Water supply powered from hydro, solar and wind energy sources
- 11 Waste treatment powered from biogas sources
- 12 Waste minimisation, recovery and recycling
- 13 Waste energy recovery (for example, landfill methane)
- 14 Micro climate management - Reducing the urban heat island effect
- 15 Passive and active solar design for heating and cooling
- 16 Public procurement policies (awareness raising)