



Natural Disasters and Climate Change: Causes, Costs and Counter-Measures

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The frequency and loss extent of weather disasters have been increasing dramatically throughout the world in recent decades. The emerging global warming will substantially intensify this trend through a greater number of atmospheric extremes and, in particular, through the intensification of windstorm and precipitation processes, unless drastic preventive measures are taken soon.

Attempts to estimate the economic effects of the anticipated climate changes on a global scale (Stern Report) have led to figures of trillions of US\$ per year (given doubling of the CO₂ concentration) or roughly 5 to 20% of the global GNP. However, it can be reduced to 1 to 2%, if mankind succeeds in avoiding temperature increases in excess of 2°C within this century.

In its own interests, the insurance industry must take on a major involvement in preventive measures, in order to guarantee coverage of weather risks in the long term. By designing its insurance products appropriately, e.g. by a sound flood exposure zoning and corresponding deductibles, it can motivate policyholders - and also the authorities - to take action to prevent losses, while at the same time reducing its own loss potentials and associated capacity problems.