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## **Global Change and Baltic Coastal Zones**

### **Chapter 7: Climate Change and Coastal Protection: Adaptation Strategies for the German Baltic Sea Coast**

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#### **Abstract**

Consequences resulting from future climate change may be one of the most severe threats for people and economies in many countries of the world. With respect to coastal Protection, the resulting changed hydrodynamic impacts are discussed globally. At present, IPCC (2007) is estimating a world-wide average sea level rise of less than 1 m within the 21<sup>st</sup> century. Other sources (e.g. Rahmstorf and Schellnhuber 2007) which are taking into account possible melting of the two main continental ice covers (Greenland and Antarctica), estimate significantly higher values especially over long periods. Besides the problem of sea level rise, also possible general changes in the frequency and intensity of storms as well as general changes in the average wind and wave field are discussed. With respect to the protection of the coast against flooding and erosion, possible adaptation strategies and measure are described in brief.