

Title of case study	New technologies for climate change adaptation
Name of organization(s)	BASF
Business sector	Chemicals
Region(s) relevant to case study	 All regions Africa and the Arab States Asia and the Pacific Caribbean and Central America Europe Least Developed Countries North America Polar regions Small Island Developing States South America
Country(s) relevant to case study	Brazil and Germany (BASF headquarters)
Adaptation sector(s) relevant to case study	 Business Education and training Food security, agriculture, forestry and fisheries Human health Oceans and coastal areas Science, assessment, monitoring and early warning Terrestrial ecosystems Tourism Transport, infrastructure and human settlements Water resources Other (please specify):
Adaptation activity	Environmental factors like heat and cold often determine the quality of the harvest. In a changing climate, there is a growing market demand for solutions that deal with weather stresses in the agricultural sector without compromising yield. BASF is supplying customers with <u>stress-tolerant plants</u> , which in turn helps improve local yields of food crops like corn, soy and wheat that are exposed to extreme weather conditions. BASF is also aware that in many parts of the world climate-related flood disasters cause devastating damage putting thousands of peoples at risk. The consequences

	of such disasters are not only flooding but also the loss of land. The regions at greatest risk are already raising the height of many of their dike systems to as much as 9 meters. BASF is offering an innovative and environment-friendly solution to provide effective and stable coastal protection. Through a specially developed elastomer polyurethane system (Elastocoast), dikes are protected by absorbing the force of the breaking waves and slowing down the water masses. BASF initiated the foundation Espaço ECO in Brazil in cooperation with GIZ. Espaço ECO focuses on promoting sustainable development by transferring knowledge and technology, especially through the implementation of solutions in eco-efficiency, environmental education and reforestation. Currently, superabsorbers are being trialed for a reforestation project in the Brazilian rain forest. These superabsorber polymers have an enormous water absorption capacity and can effectively store it in soil, thereby increasing water storage capacity.
Cost-benefit	The development of these technologies has future market potential for BASF.
Case study source(s)	Making Climate Companies' Business (WRI) Business Leadership on Climate Change Adaptation: Encouraging Engagement and Action (PwC)



Elastocoast Source: www.polyurethanes.basf.de