An overview of the Russian-German research project „Laptev Sea System: the Transpolar System of the Arctic Ocean“ which aims to assess how climate change will affect the highly sensitive Arctic environment and in how far the changes will be of consequence for Europe will be presented. Research areas are the Laptev Sea as the most important area of sea-ice production and the Fram Strait as the only deepwater and intermediate water connection between the Arctic Ocean and the Atlantic Ocean. The Transpolar Drift connects both regions. We will show some scientific highlights of the TRANSDRIFT expeditions to the Laptev Sea onboard Viktor Buynitskiy in 2013 and 2014.