First part of bachelor thesis introduces the concept of shale gas - what is the nature of the gas, why it is called shale, etc. Then there is described the technology of mining and acquisition of gas. Another chapter informs about shale gas reserves in the world, its importance and the planned career intentions. Very important part of this work is to look at the impacts of extraction of this gas, in particular climate change, water and soil pollution, impacts on the population, but also other phenomena, such as earthquakes caused by the extraction of this shale gas. The last part is the chapter on the current situation of shale gas exploration in the Czech Republic. At the conclusion, the whole situation regarding shale gas is evaluated and my own views on this extraction are presented.