

# Urban Transformation for the Prevention of Disaster

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**Key words:** urban transformation; Kiruna; mining

## SUMMARY

[C7 theme:] Land policy and reform to support sustainable use of land

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## SUMMARY

Sweden's northernmost and as for area largest municipality - Kiruna - is undergoing major urban transformation as a consequence of large-scale mining. Changes in the physical environment caused by the mining operations are cracks, collapse of land, pollution of water and soil, dust, poor air quality, etc. There are approximately 20 000 inhabitants living in Kiruna. To prevent a future disaster not only for residents but also for animals and plants, the municipality of Kiruna along with other actors have started a long-term project of moving the town to a new place within an acceptable distance, approximately three kilometers to the east.

There is a special bond between Kiruna and mining. People living in this so-called "Arctic town" use to say that without the mining, Kiruna would not have existed, and without Kiruna, it would be impossible to mine the ore.

Kiruna's iron ore mine is the largest underground mine in the whole world, producing over 26 million tons of iron ore each year.

The transformation of Kiruna is a complex process which includes collaboration between many actors. A few to mention: the Municipality of Kiruna, the County Administrative Board, Lantmäteriet (the Swedish mapping, cadastral and land registration authority), property valuation experts, architects, the state-owned mining company LKAB (Luossavaara-Kiirunavaara Aktiebolag), residents of Kiruna and others.

This paper presents the different phases of urban transformation implemented so far with success and in good time. The objective is not only to protect people, animals and plants, but at the same time to ensure important raw material (iron ore) for Sweden and rest of the world.