

Tromsø

YOUNG MEMBERS' PAGES ◀

Kiruna 4-ever

BACKGROUND

Iron ore extraction is a key industry in Kiruna. During World War II, large quantities of iron ore were transported by rail from Kiruna to the east coast to be sold in Germany. Luossavaara, a former mine, is now used as a skiing slope, while Kiirunavaara mine continues to operate and is the town's primary economic resource.

In 2004, the state-owned mining company, Luossavaara-Kiirunavaara AB (LKAB) sent a letter to the local government explaining that it needed to dig deeper into the Kiirunavaara hill, which could result in the ground below the town to crack.

Over the last decade, land deformations due to the mining activities had become more apparent and huge fissures were appearing across the city, creeping towards the city centre.

It was then decided that the centre of the municipality be relocated to counter mining-related subsidence.

RELOCATION

The challenge to relocate Kiruna attracted architects from all over the world. A total of 57 teams expressed interest, of which only ten were selected to participate in the municipality's international competition for a 20-year masterplan of Kiruna's phased relocation by 2033.

In February 2013, White Arkitekter, along with Ghilardi+Hellsten Arkitekter, won the international competition. White's proposal, titled *Kiruna 4-ever*, however contradicted the municipality's brief, and took a more long-term and sustainable view to the relocation, initiating a 100-year master plan.

The 100-year master plan is aimed at creating a sustainable model city with a diverse economy less dependent on iron ore.

White envisions the city moving to its final location in phases – a series of projects will allow the city to grow along a new urban belt to its final location. In other words, the city will 'crawl' to its final destination.

The first phase of the master plan is expected to be completed by 2021.

CHALLENGES AND TRANSFORMATION

The character of the former town will be retained through the reuse of material from demolished buildings. Some iconic buildings, such as the historic church will be relocated unaltered to its new location. The City Hall will be cut into four parts and transported to its new location, where it will be reassembled. A new library (2019) and travel centre (2018) also form part of phase 1 of the master plan.

The climate and location of the city also pose their own challenges to those working on the project. With the city located about 150 kilometres north of the Arctic Circle, it experiences perpetual daylight from May to August, and continual darkness from December to February. Temperatures remain below -15°C for most of the year, with snowfall throughout the year.

This relocation has provided Kiruna with an opportunity to transform itself into an economically, environmentally and socially sustainable city. The new city centre will focus greatly on higher density, supplemented by public transport and non-motorised transport.

According to the master plan, the new town will use resources more efficiently, harnessing the vast amount of waste heat generated by the mining activity, along with wind turbines. The



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Kiruna, a small town in northern Sweden with about 20 000 inhabitants, is about to undergo one of the biggest urban transformations of our time. The entire city will be relocated three kilometres to the east over the next few decades. Yes, the ENTIRE CITY – three kilometres!

developments will be designed to a carbon neutral agenda.

Once the iron ore in the region has been fully extracted in the distant future, Kiruna will have to sustain itself, and tourism is proposed to play a vital role in the economy of Kiruna.

Kiruna is a popular destination for both locals and international tourists wanting to see the midnight sun and northern lights, and about 17 km from Kiruna, is the village of Jukkasjärvi, home to the world's first ice hotel.

The mines and its facilities could also later become an historical industrial park and a regional tourist attraction. It has furthermore been proposed that the old town be transformed into a park and re-established as the historic route for reindeer migration.

Kiruna will certainly be transforming itself over the next few decades! □