DEPOSITS

A database of the deposits has been compiled including the following information:

Deposits Russia	Occurrences Finland
Map sheet	ID
Date of the occurrence discovery	Municipality/Town
Geological characteristics	Village
Geological age	Place
Full index of the target (according to age)	Observer
Occurrence's code in the legend	Latitude
Genetic type of occurrence	Longitude
Name of rock	Positioning method
Colour	Area of the occurrence
Grain size	Topographical levels - lowest
Structure and texture of the rock	Topographical levels-highest
Host rocks	Description of the area
Facies of occurrence formation	Volume estimation
Category rating forecast resources	Evaluation of environment
Category of evaluation of predicted resources	Nearest inhabitation
Predicted resources	Logistic conditions
Bibliography	Suitability/further actions
Photos of architectural monuments where natural stone of this occurrence was used	Occurrence type
	Rock class
	Rock name
	Mineralogy
	Jointing
	Schistosity
	Alteration of the rock
	Structure of the rock
	Texture of the rock
	Grain size
	Weathering
	Colour
	Estimate of block size

http://projects.gtk.fi/ENPI

Efficient use of natural stone in the Leningrad Region and South-East Finland

4.

Evaluation of natural stone resources Database

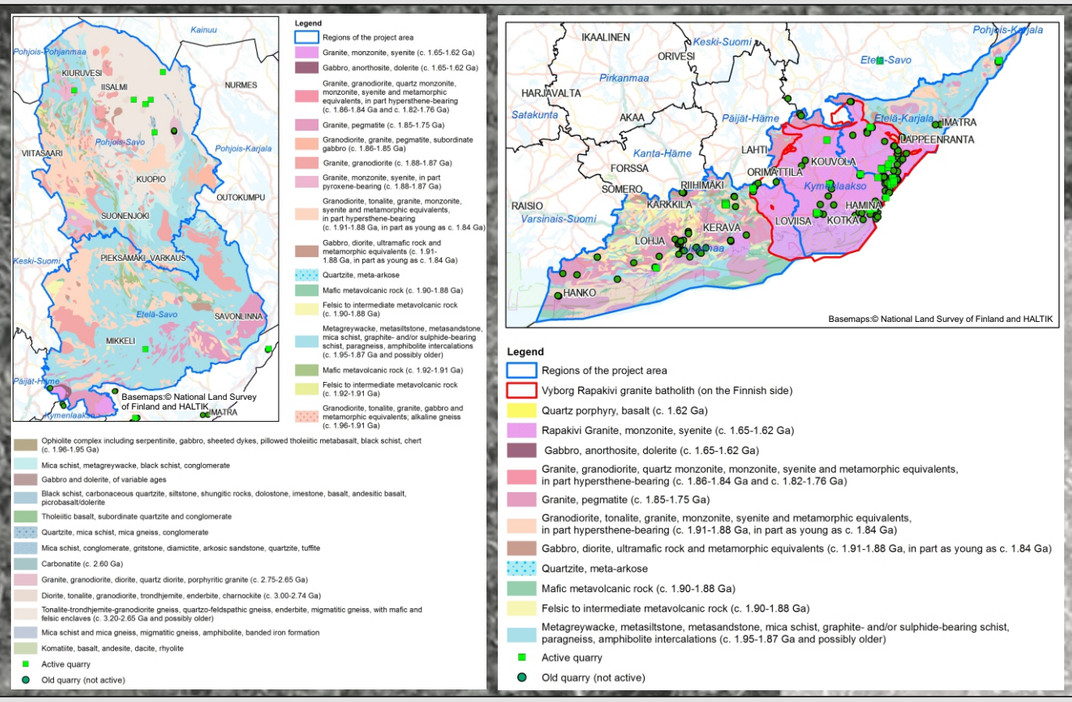
Southeast Finland and Leningrad region

GTK Saimaa University of Applied Sciences
Petersburg Complex Geological Expedition
Saint-Petersburg State University
This project is co-funded by the European Union, the Russian Federation and the Republic of Finland
ENPI
South-East Finland - Russia ENPI CBC 2007 - 2013

Geology of the project area

The project area has been assessed for evaluation of future exploitations, evaluating the geology of the area, the deposits and the active quarries, including information relative to the historical quarries used on the constructions.

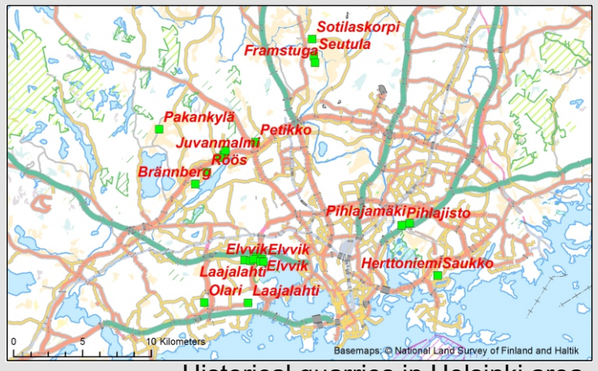
The project area is mainly located in Southern and South-eastern part of Finland covering the geological units of Western Uusimaa belt and Uusimaa belt comprising of granitoids, metavolcanic rocks and migmatizing granites, Saimaa area is a high grade granulitic area comprising upracrustal rocks such as schists, gneisses, granitoids and metavolcanic rocks, Savo belt composed by metamorphic rocks with ore potential not very promising as natural stone reserves, Karelian domain and the eastern part of the Central Finland Granite complex are granitic rocks as well as dykes of black stone. South-eastern Finland reaching Russia in the Karelian Isthmus is important promising area for rapakivi granite batholith



Historical supply

During the times there has been a lot of small quarries in the southern part of Finland, especially near the shore area.For older constructions also local boulders have been utilized since quarrying would have been too difficult. The stones used as boulders have reflected the local bedrock and the effects of the glacial transportation.
The size and shape of the boulders
have been the major factor in choosing
the appropriate materials for the constructions.

In constructions starting from the 18th century stone from local quarries has also been utilized in the buildings, and the latest structures built in the 19th century and in the beginning of the 20th century have been made of quarried natural stone extracted from several small quarries that have been used during the times by different companies or entrepreneurs.



Historical quarries in Helsinki area

Active quarry

In Etelä-Karjala and Kymenlaakso almost all of the active quarries are of rapakivi granite and the main stone production area is Lappeenranta – Ylämaa area representing both pyterlite and wiborgite type of rapakivi granite. In Etelä-Karjala region it is also produced black gabbro called Saari Black in Parikkala. Rapakivi granite is also produced in Uusimaa region, together with migmatitic granites of which Mäntsälä migmatite, named ”Aurora”, is the most produced.In Uusimaa has also been produced Porkkala Red granite, which is a rapakivi granite belonging to the Kymi rapakivi suite and situated on the west side of Helsinki. The quarry is not in active use at the moment. A dabase of old and active quarries has been compiled including the following information:

Old quarries / Active quarries	Quarries russia
ID	ID code of observation
Municipality/Town	Municipality town
Village	Village
Place	Name of deposit
Map sheet	Map sheet
Latitude	Northern latitude
Longitude	Eastern longitude
	Area, m^2
Area	Depth (m) of the top of the buried target (depth of the deposit)
Topographical levels - lowest	Rock outcrops in the area
Topographical levels-highest	Thickness of the Quaternary rock (m)
Exposing of the rock area	Rock name
Quaternary coverage	Colour
Rock type	Grain size
Stone type (industrial)	Structure and texture of the rock
Commercial name	Photos
Colour	Research permit
Grain size	License to exploitation
Structure and texture of the rock	Entrails user
Quarrying started	Geographical location
Quarrying ended (if ended)	Authority approving reserves, protocol number, year of approving reserves
Total amount produced	Geological characteristic
Quarrier 1	Geological age
Quarrier 2	Full index of the target (according to age)
Quarrier 3	Genetic type of deposit
Reference building / site 1	Degree of deposit development
Reference building / site 2	Category of evaluation of predicted or proved resources
Reference building / site 3	Unit of predicted resources or proved resources measure
Usability	Predicted resources or proved resources
Photos	Output of component, blocks, raw material, %
Research permit	Rock class according to the State standard 30108-94
Quarrying permit	Bibliography
Land ownership	Photos of architectural monuments where natural stone of this deposit was used
	Deposit's code in the legend
	Host rocks
	Facies of deposit formation
	Type of natural stone
	Mining method
	Alternative (old) name of the deposit