

RAW MATERIAL AND TRANSPORT IN THE HIGH NORTH

24 April 2012

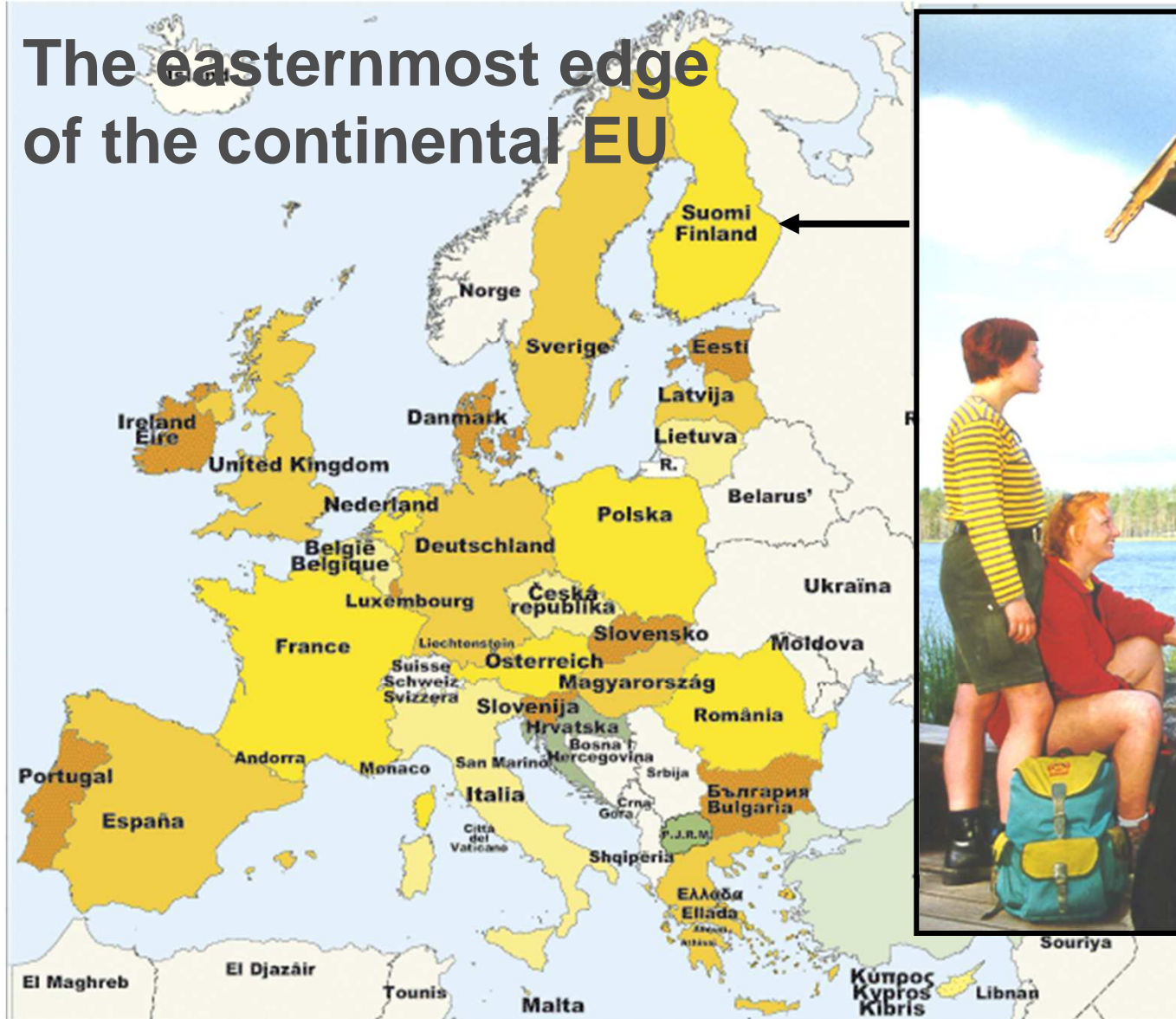
Regional perspective on raw material

Dr. Pentti Hyttinen

Regional Council of North Karelia



The easternmost edge of the continental EU



Virmajärvi, Ilomantsi

Dr. Pentti Hyttinen

Regional Mayor of North Karelia, Finland, 2001-

Job history

- Forestry Expert at DG Research of the European Commission in Brussels 1998-2001
- Director of the Forestry Centre of North Karelia 1996-1998
- Various research positions at the University of Joensuu and at the European Forest Institute during 1990s.

Education

- Ph.D. in Forest Management and Economics, 1992, University of Joensuu, Finland
- Master's Degree in Natural Resources Development, 1990, Texas A&M University, USA





Regional Council of North Karelia

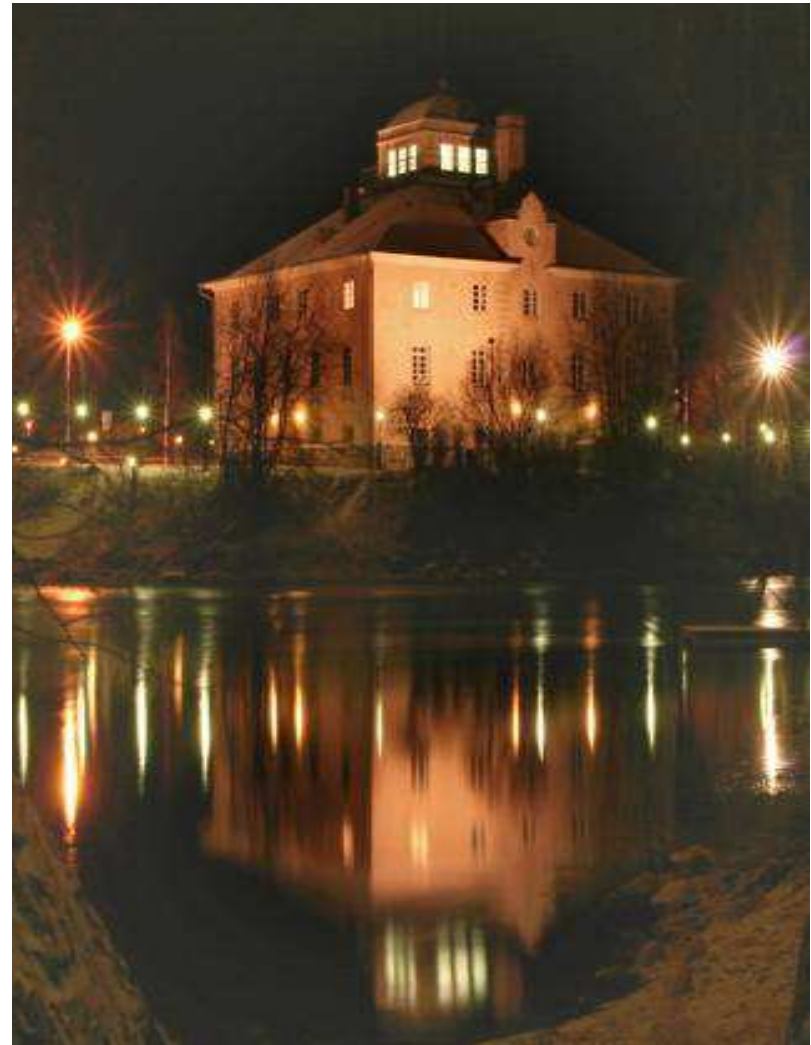
**Federation of the 14 municipalities
in the region**

**Overall responsibility of regional
development activities**

Allocation of EU funds

Land use planning

Regional PR and lobbying



Europe 2020: priorities



1) **Smart growth**

improving the EU's performance in education,
research & innovation and digital society

2) **Sustainable growth**

building a competitive low-carbon economy that uses
resources efficiently and sustainably

3) **Inclusive growth**

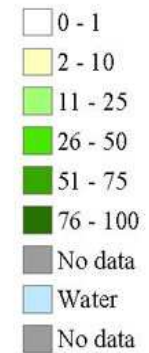
raising employment rate – more and better jobs

The contribution of the Northern Sparsely Populated Areas to the smart, sustainable and inclusive growth of EU is based on *forests, mines and energy sources.*



The Green Gold of Europe

Proportion of total forest
from total land area
(% at 1 km x 1km resolution)



0 75 150 300 450 600 750
Kilometers

***Forests are
growing
much faster
than they are
being harvested!***

	Norway	Sweden	Finland	Russia	Total
Forest area, 1000 ha	2 761	6 797	9 043	68 457	87 058
Growing stock, million m ³	45	628	618	6 665	7 955
Increment, million m ³ /yr	1.4	18.8	26.7	74	120.9
Fellings, million m ³ /yr	0.18	12.5	11.7	23.5	47.9

Special expertise in the forestry sector

- ❖ European Forest Institute
- ❖ Finnish Forest Research Institute
- ❖ University of Eastern Finland
- ❖ University of Applied Sciences
- ❖ Joensuu Science Park
- ❖ Forestry Centre
- ❖ Environment Centre
- ❖ etc...



Leading European region of forestry technology industries



PONSSE



 **OUTOKUMMUN METALLOY**



 **Pentin Paja Oy**



JOHN DEERE



 **MANTSINEN**



Sustainable large-scale industries

– back-bone of the regional economy



Wood chemistry



Energy



Health products



Construction



Fibre



Tourism & recreation



What do the forests of the High North mean to the EU?

- Forests have increasing and diversified value in meeting the EU's strategic objectives in the future.
- Forests provide *solutions* for the EU's policy challenges and economic development.
- At the same, forests provide *opportunities* for citizen's sustainable consumption and new entrepreneurship.

Why is it important for the High North?

The increase in the demand of renewable resources creates opportunities for new livelihood in the High North because the region:

- *is rich in resources*
- *has expertise in forest-based products, production techniques and dealing with customers*
- *has an excellent infrastructural platform for innovation*
- *has an open attitude to development and change*

How about mining?

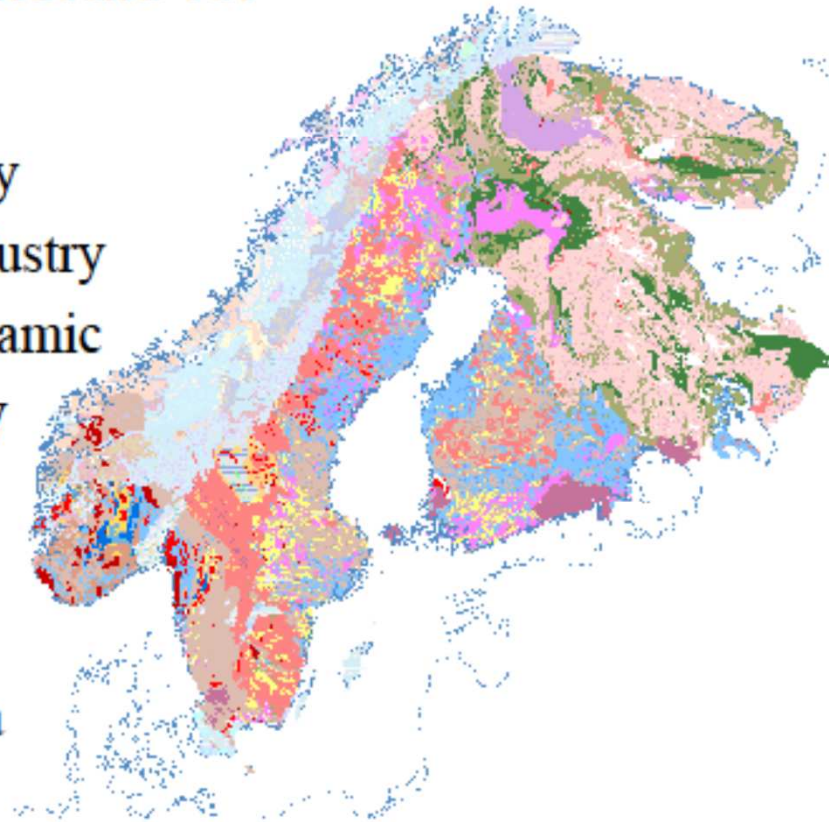
- The EU consumes 20 % of the global mineral resources but contributes only 4 %.
- As the world's demand of raw materials is growing, more attention should be given to the resources available on the European continent itself.
- Practically all of the 14 minerals listed by the European Commission as critical to the EU can be found in the High North.

→ The High North is the solution!

Mineral resources of the Barents region

Industrial minerals for

- Fertilizers
- Paper industry
- Chemical industry
- Glass and ceramic
- Paint industry
- Agriculture
- Construction
- High Tech
Li, Nb, Be, Ta
- Diamonds



Metals

- Gold, silver
- Nickel
- Chromium
- Platinum
- Palladium
- Zinc, copper
- Lead
- Iron
- Molybdenum

Mining is smart in the High North

- Human capital, research and technology development are well renowned.
- Today 80 % of the mining technology in the world comes from the Nordic countries.



... and sustainable

- Mining in the High North is safer and greener than in the other parts of the world.
 - The High North is already a world leader in paper and pulp.
- We are familiar with the practices and behaviour of the industry's sustainable development.



... as well as inclusive

- Due to our long history and expertise, we are able to easily forecast the changes in the industry and act accordingly to improve employment rates.

Future development requires investments

New mines opening means increasing transportation of products and materials, commuting of employees and construction

→ Investments are needed to develop:

- rail networks and other types of transportation
- IT infrastructures, such as broadband access
- technological research & innovation
- cross-border geological surveys



REGIONAL COUNCIL OF
North Karelia

Thank you!
(This is a sun-rise!)