Challenges in addressing climate change issues within impact assessment practice of transport projects in Estonia

Heikki Kalle
Transport induced changes in greenhouse gas emissions come from
- Direct emissions by burning fuel
- Indirect emissions from supporting infrastructure (construction, operation)

Most of the supporting infrastructure and some of the vehicles use electricity
Examples

Engines of transport vehicles
Supporting systems (lights, pumps)
Challenges in SEA/EIA practice

Climate <> transport
“The higher you fly the fuzzier the picture gets”

Often modernisation has its social costs

*Handbook on estimation of external cost in the transport sector.*
Internalisation Measures and Policies for All external Cost of Transport (IMPACT) CE, 2007

Handbook has been “translated” into Estonian context in 2008 but is difficult to apply as in strategic scale has to rely on firm energy production policy
How electricity is produced
Electricity production in future

**National strategy**
Nuclear power plant by 2023
25% of electricity from renewable sources by 2020 (waste incineration, water, wind)
Links to Finland and Sweden
Reduction of oil shale based energy production

**However, uncertainty starts already from the strategy itself**
14B EEK to new boilers in oil shale heated power plants
24B EEK to subsidies over 20 years of operation
Increase of oil shale production
Challenges in energy policy

- Alternative sources of power are not popular (wind and nuclear)
- Biomass energy needs proper resource mapping
- Waste management is experiencing important changes due to developments in segregation technologies
- Present energy production is related to the social problems in the Ida Viru region
  - rate of non-citizens is high,
  - high crime rate (second to capital region only)
  - unemployment rate is close to 18%
Solutions

- Problems are political rather than scientific needing therefore discussions in appropriate level.
- Actions should be carefully planned and executed.
- Comprehensive approach with public debate.

With transport infrastructure plans and projects different scenarios are often debated in relation to energy sources.

THANK YOU!