

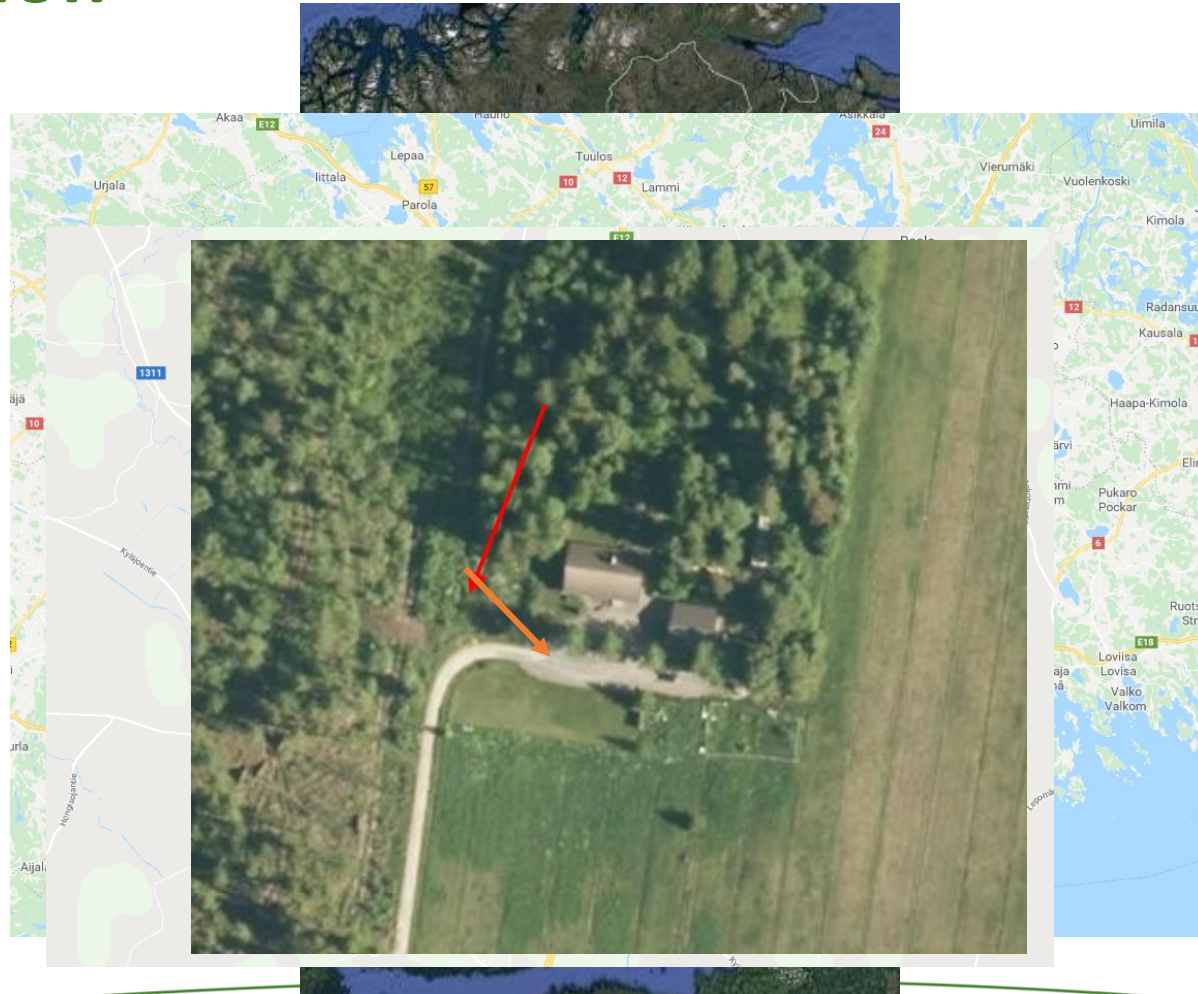
VillageWaters

Nurmijärvi Pilot

Vesa Arvonen, Sykli
Finland

Riga 14 March 2018

Location



Technology

Ground filtration (old and new)

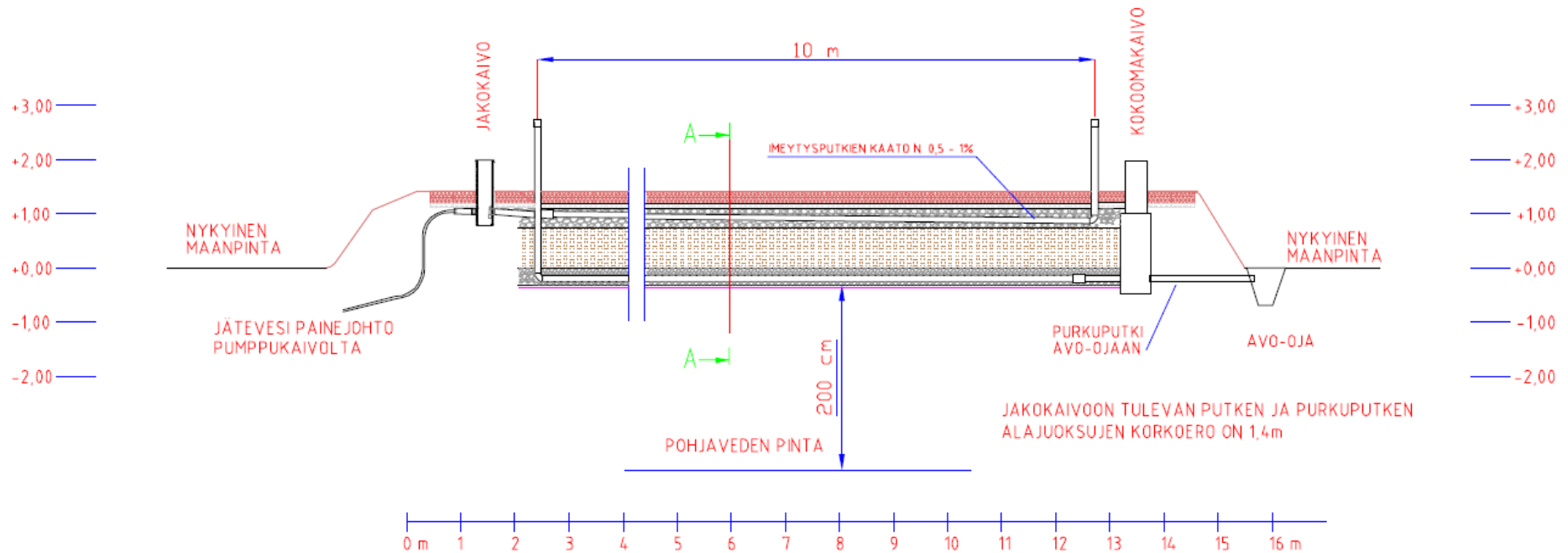
- four septic tanks
- Two pumps (0.4 kW)
- ground filtration
- Old sand filter clogged
- Simple technology



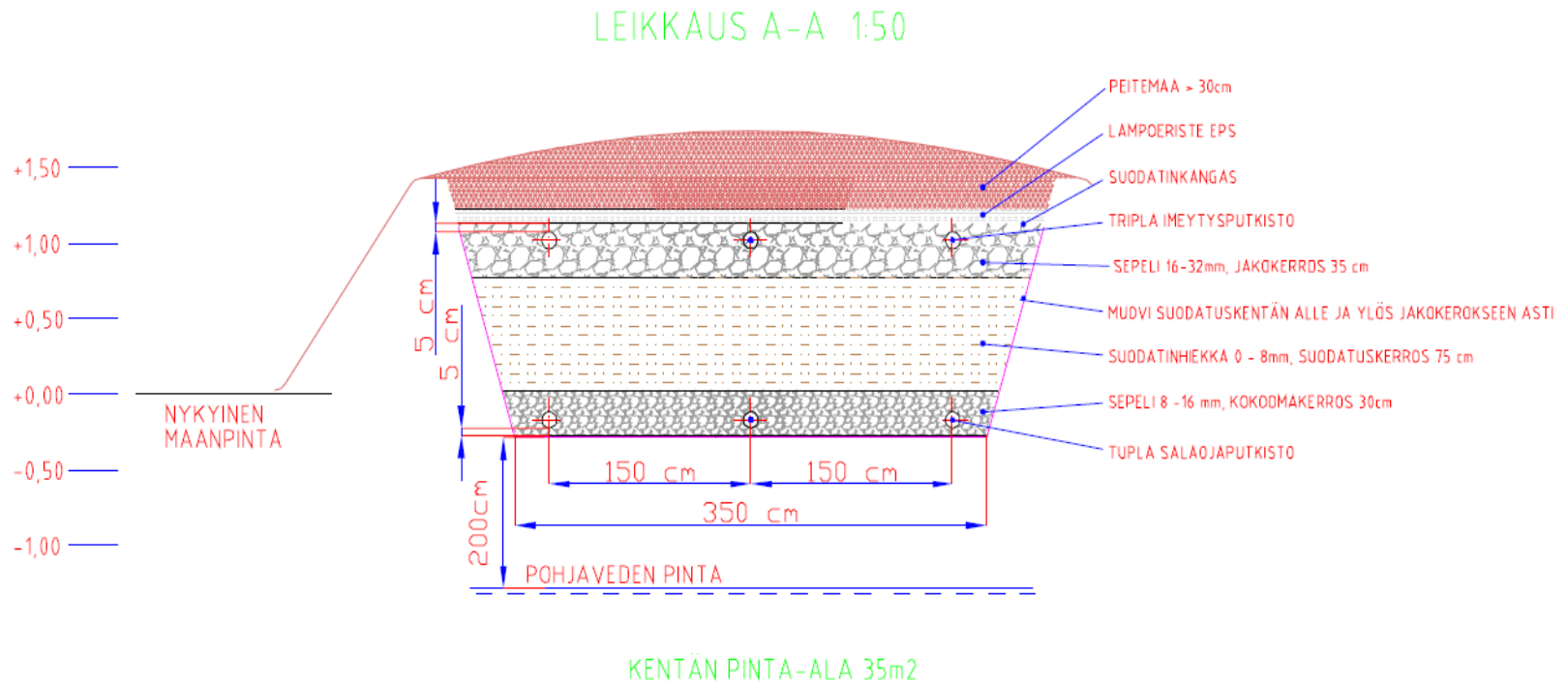
Structure



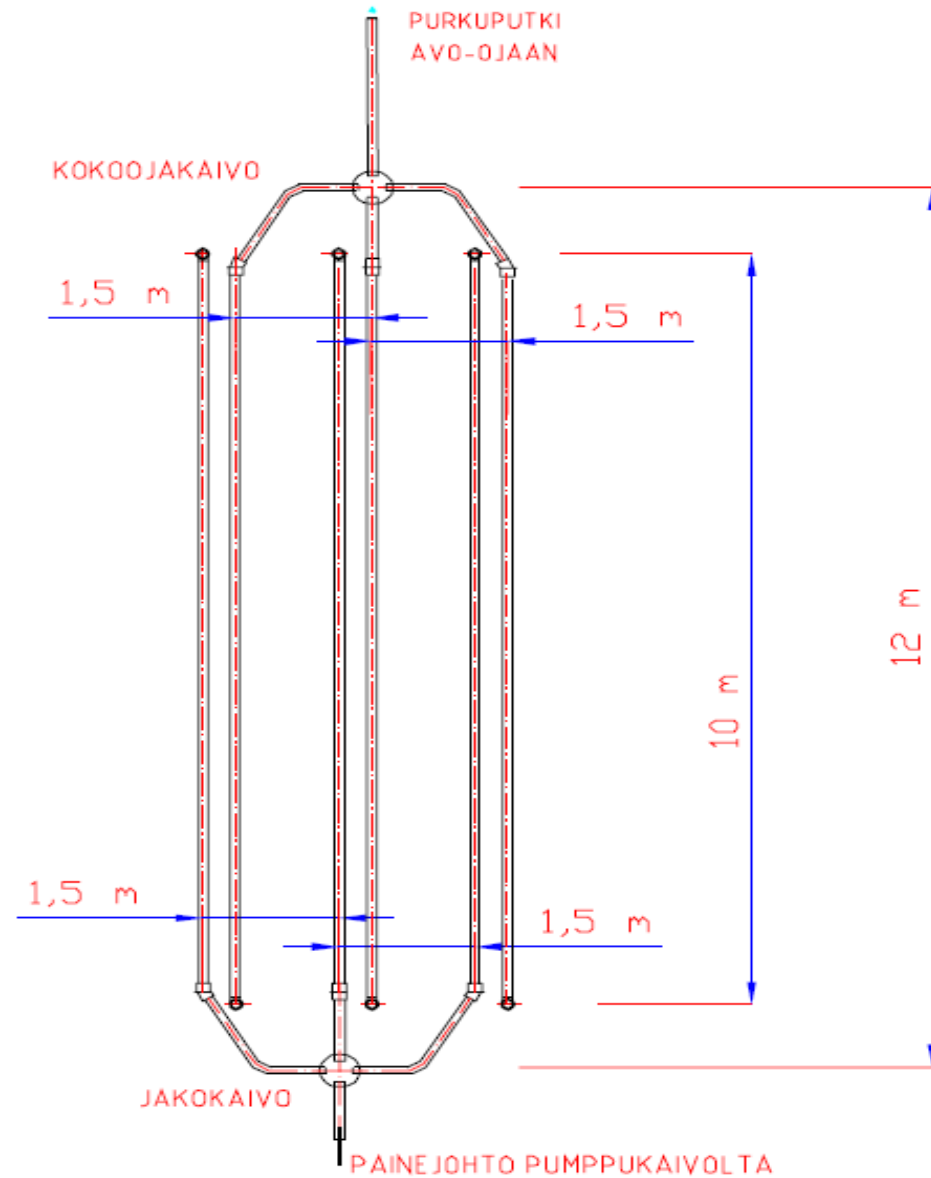
Structure



Structure



Structure



Discharge



Challenges

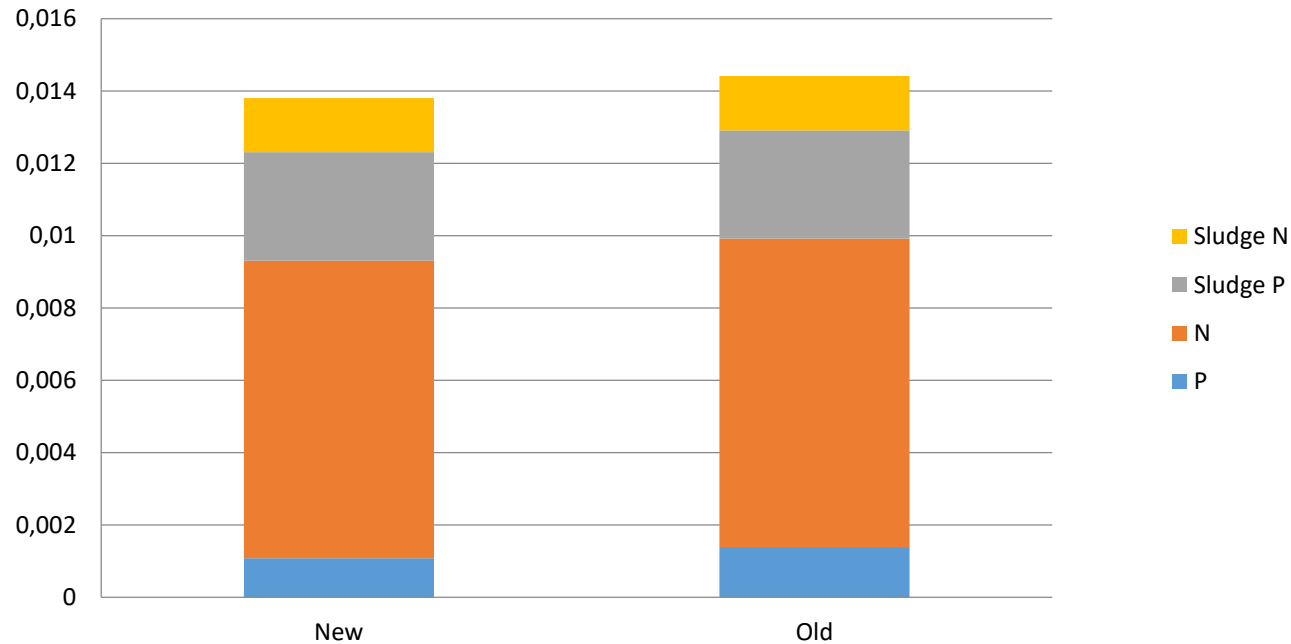
- Implementation was made mainly according to plan.
- There were some challenges in part delivery like missing parts and wrong pipes.
- A second pump had to be installed after the soil filter so that the water could be discharged to the ditch.
- The soil filter was slightly higher than planned and in that case the excavator was too small for that work.
- The soil was too immersible => the working area of the excavator had to be built with a supporting work platform (gravel and geotextile)

Life Cycle Assessment

Eutrophication impact

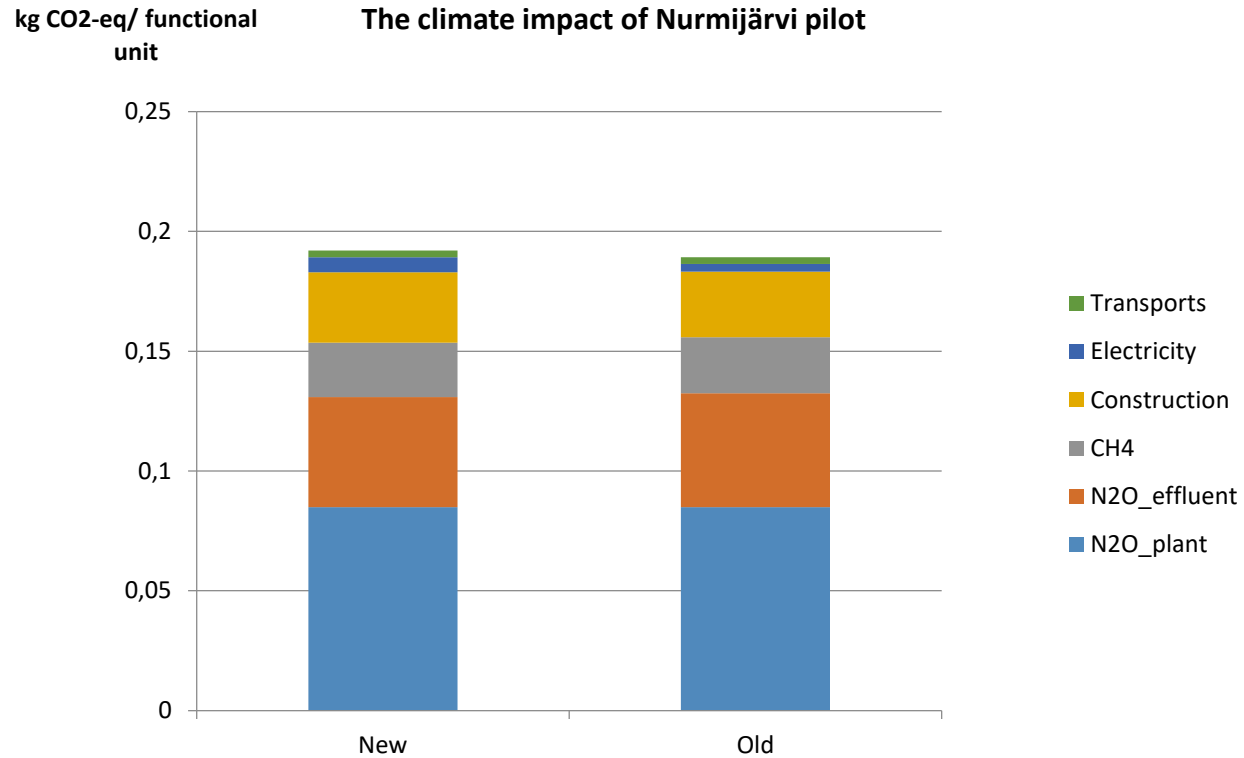
kg PO₄-eq/ functional unit

The eutrophication impact of Nurmijärvi pilot



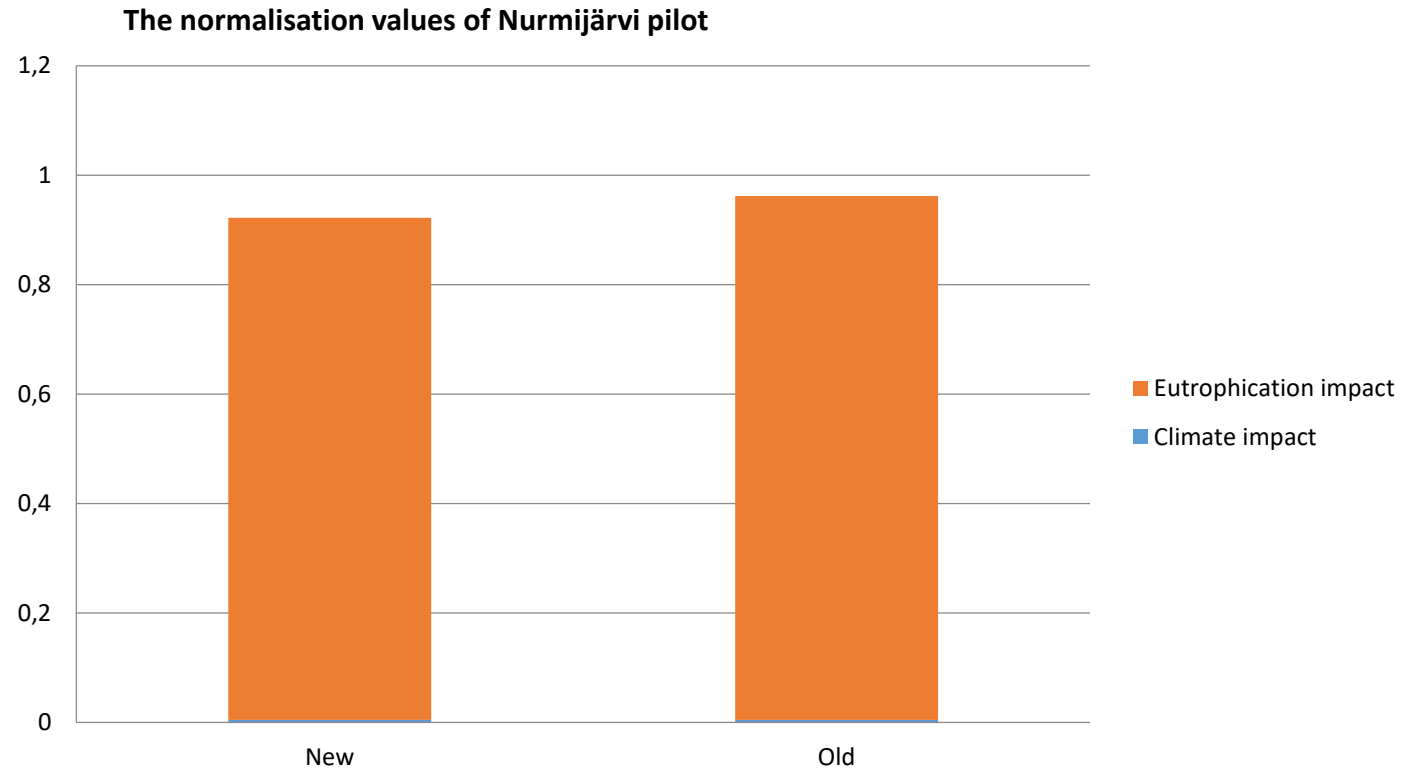
Life Cycle Assessment

Climate impact



Life Cycle Assessment

Normalisation impact



Conclusions

- Similar technology => No big changes on results

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