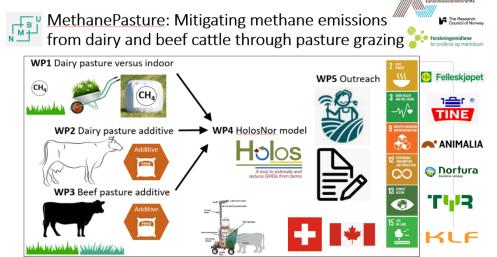
Topic/Title

Methane yield and intensity from three contrasting high-yielding dairy cattle feeding regimes: Grazing, cut-and-carry, and grass silage mixed ration



Summary The MethanePasture project aims to increase sustainability in the production of milk and meat from dairy and beef cattle. This will be achieved through a series of experiments that, under Norwegian conditions, will provide better estimates of the production of methane from grazing animals compared with indoor feeding. The estimates will be calculated at national and at farm level based on results from early and late in the grazing season. The following assumptions will be tested i) pasture grazing dairy cows have a lower methane production per unit feed and per unit milk compared to cut-and-carry grass and grass silage feeding indoors, ii) reduction of methane by feed additives is greater in early than late pasture grazing dairy and beef cows, iii) current compared to improved HolosNor and HolosNorBeef models overestimate methane emissions from pasture grazing dairy and beef cows. By improving a farm advisory tool and engaging six actors from agricultural and food industry, MethanePasture ensures user-friendly and targeted outreach. Filling the knowledge gap if pasture grazing per se can reduce methane emission, and if methane reducing feed additives are more effective in early pasture grazing will provide practical and financial benefits to the society and industry.

Type of thesis work: barn/field work, laboratory work, literature study (choose what you prefer)

Subject area ruminant nutrition, methane emission, pasture grazing

Language thesis Bachelor thesis: Norwegian or English; Master thesis: English

Bachelor or Master thesis Bachelor thesis, Master thesis

Credits Bachelor thesis: 15, Master thesis: 30/45/60

Project Link: not online yet

Please contact Egil Prestløkken egil.prestlokken@nmbu.no