

Biogas in transportation – in a resource, environmental, and welfare economic perspective

Biogas may be a promising alternative fuel mainly for heavy-duty transportation that is CO₂ neutral and further helps to reduce methane emissions due to the handling of digested slurry.

The study will analyse the potential of biogas production from all Danish organic sources under different scenario assumptions.

The analysis will include energy demand of the road transportation sector by means of transport and fuel types, and potential use of the limited biogas source also taking into account analysis of alternative fuel options available for transportation (electricity, hydrogen, biofuels).

An integrated well-to-wheel and welfare economic analysis of production of biogas for use in the transportation sector will be carried out. It includes the economic, emission and environmental impacts associated with the use of bio-resources, land, capital, labour and raw materials etc. for biogas production, upgrading and distribution of biogas.

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Contact person: Senior Scientist Steen Solvang Jensen, ssj@envs.au.dk