Deutsches Biomasseforschungszentrum

gemeinnützige GmbH

WORKSHOP - MetHarmo

European harmonisation of methods to quantify methane emissions from biogas plants

10.08.2016

KUBUS, Helmholtz Centre for Environmental Research – UFZ, Room 1A

Permoserstraße 15, 04318 Leipzig

(may 11th, 2016)

DBFZ

Topic

For reaching climate protection targets it is essential to quantify the emissions from greenhouse gas emitting sources. The results enable to determine the environmental impact of a technology and to gain knowledge of the value of emission mitigation strategies. Biogas plants emit methane. Known major sources are leakages, pressure relief vents, gas utilisation devices and open storage tanks. To date, no common European standard is established to measure the overall emission rates of methane from biogas plants. The objective of the proposed project is to harmonise some first national approaches to quantify the emissions to a common procedure.

Program

| time | Workshop Opening |
|---------------|---|
| 9:00 - 9:15 | Prof Michael Nelles (Scientific managing director, DBFZ) |
| | Dr Jan Liebetrau (Head of Biochemical Conversion Department, DBFZ) |
| | Project Overview (moderation: Jan Liebetrau) |
| 9:15 – 9:35 | Methane emissions from biogas plants – status quo, Jan Liebetrau (DBFZ) |
| 9:40 - 10:00 | Measurements of methane emissions from biogas production – Data collection and comparison of measurement, Magnus Andreas Holmgren (SP – Technical Research Institute of Sweden) |
| 10:05 – 10:25 | MetHarmo – European harmonisation of methods to quantify methane emissions from biogas plants, Torsten Reinelt (DBFZ) |
| 10:25 – 10:40 | Coffee break |

| Remote sensing methods (moderation: 10:40 – 11:00 Quantification of methane emissions from biogas plants by the use of an inverse- dispersion modeling method, Angela Groth (ISWA, University of Stuttgart) 11:05 – 11:25 Dispersion models to determine emissions from biogas plants, Marlies Hrad (BOKU/Vienna) 11:30 – 11:50 Quantification of methane emissions from biogas plants by the use of a tracer dispersion method, Charlotte Scheutz or Anders Michael Fredenslund (Technical University of Denmark) 11:55 – 12:15 The application of Differential Absorption Lidar (DIAL) for methane monitoring of biogas plants, Heather Powell or Dai Jones (National Physical Laboratory – NPL, UK) 12:20 – 13:00 Lunch 14:10 – 14:10 Meeting in Torgauer Str. 116 (20 min. groups of 15 persons) 14:10 – 14:50 Coffee break On site methods 14:40 – 15:10 Gas emissions – explosion protection: Safety in theorie and practice, Wolfgang Horst Stachowitz (Das - IB GmbH) 15:15 – 15:35 On-site measurement methods for determining methane emissions from biogas plants used in the Swedish Voluntary System, Magnus Andreas Holmgren (SP) 15:40 – 16:00 Direct methods for determining methane emissions from single sources of biogas plants, Torsten Reinelt (DBFZ) | time | |
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| 16:10 – 16:30 Discussion | 15:40 - 16:00 | |
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19:30 - (22:30)

Networking dinner

Moritzbastei Universitätsstraße 9 04109 Leipzig

