Country Report Update: Biogas in the Netherlands

IEA-Bioenergy Meeting Task 37
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NL Agency

» Focus on sustainability, innovation and international
Results Evaluation Biogas Sector in the Netherlands

Evaluation of projects in full operation in 2010 (No. = 113, not including sewage sludge digestion)
Responses to evaluation = 84

Classification:

Class A: co-digestion < 500 kWe
Class B: co-digestion 500 kWe < 1MWe
Class C: co-digestion > 1 MWe
Class D: other
Commissioning of biogas plants

Number of installations

- Class A
- Class B
- Class C
- Class D

<table>
<thead>
<tr>
<th>Period</th>
<th>Class A</th>
<th>Class B</th>
<th>Class C</th>
<th>Class D</th>
<th>Not known</th>
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<td>4</td>
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<td>2005-2006</td>
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<td>11</td>
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<td>2007-2008</td>
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<td>na 2008</td>
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Focus on sustainability, innovation and international
Distribution of tons/annum of input to the digestors

- **Co-digestion**
  - ≤ 5000: 7%
  - 5001-10000: 8%
  - 10001-20000: 39%
  - 20001-50000: 27%
  - > 50000: 4%

- **Not co-digestion**
  - ≤ 5000: 8%
  - 5001-10000: 7%
  - 10001-20000: 8%
  - 20001-50000: 8%
  - > 50000: 4%
Distribution of input material (outer ring)
Contribution to biogas production (inner ring)

Outer ring: percentages based on tons processed
Inner ring: percentages based on share of total biogas production

- Manure: 8%
- Food waste: 3%
- Energy crops: 10%
- Industrial waste: 17%
- Agricultural residues: 22%
- Household waste: 49%
- Other: 13%
Status of gas buffer/storage capacity (in hours)

Gas Buffer (hours of storage capacity) vs. % of plants questioned:

- ≤1: 12%
- 1.1-2: 14%
- 2.1-3: 18%
- 3.1-4: 12%
- 4.1-5: 14%
- 5.1-10: 16%
- >14: 14%
Number of CHP engines per biogas plant

- 1 CHP engine: 33%
- 2 CHP engines: 49%
- 3 CHP engines: 10%
- 4 CHP engines: 6%
- 5 CHP engines: 2%
Full load operating hours per year
Electrical efficiency (Gross and net)
Questions?

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