

# Gas analysis report for IEA Task 33

Guideline for researchers, technology developers  
and operators

GAW Workshop, KTH, Stockholm  
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# Background

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**Proper analysis is crucial** for the research, development and operation of biomass and waste gasification systems. In this case, not only permanent gas compounds, but also other contaminants present in the gas are relevant for the assessment of the system performance. However, it can be **sometimes difficult to select the right approach** for the measurement of the compounds produced, since gas analysis is often performed following own practices by different institutes and/or companies.

# Goals of the IEA report

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Describe gas analysis techniques in raw gas

Describe gas analysis techniques in cleaned gas

Main focus of compounds:

- dust
- permanent gases
- C<sub>2</sub> - C<sub>7</sub> hydrocarbons
- tars (PAH)
- other impurities (details TBD).

# Draft lay out of report

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Divisional into 3 main topics

1. High temperature  $> 800$  °C
2. Low temperature  $< 750$  °C
3. Waste gasification

Novel approaches will also be discussed in the report.

# GAW support options

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So far ECN has not started yet with the study, so no factual list exist.

- Identifying most relevant measurement techniques that need to be in the report.
- Review and add-on after first draft version
- The report should have best practices mentioned and gaps.
- Vlogs are included (for instance on SPA or guideline).  
Question: Which other relevant things should be put in a vlog?

# Contact point

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## Berend Vreugdenhil

### ECN

Westerduinweg 3  
1755 LE Petten  
The Netherlands

P.O. Box 1  
1755 ZG Petten  
The Netherlands

T +31 224 564 504  
M +31 610 111 176

[vreugdenhil@ecn.nl](mailto:vreugdenhil@ecn.nl)  
[www.ecn.nl](http://www.ecn.nl)