11 June 2026

To: Laboratories participating in Proftest Syke proficiency tests

Proficiency test CAL 08/2026 – Gross and net calorific values of solid fuels

Proftest Syke will organise a proficiency test (PT) for the analysis of gross and net calorific value of solid fuels.

The purpose of this proficiency test is to ensure the comparability and accuracy of the results of the participants. Depending on the measurement, 10 to 20 laboratories are expected to participate in the proficiency test. The measurands and samples of this proficiency test are included in the Calorific value scheme of the Proftest Syke accreditation scope (finas.fi/sites/en).

Sample matrices

Peat, wood pellet, biofuel, and coal.

Timetable

Registration	**11 June – 19 August 2026**
Sample dispatch date (national participants)	1 September 2026 (see Chapter 4 *Sample delivery)*
Analysis of the samples	at the latest on 30 September 2026
Reporting of the results	**2 September – 5 October 2026**

Participation fee

The participation fee is **995 €** (+ VAT) including all measurements and samples.
See detailed information in Chapter 9 *Participation fee.*

Mirja Leivuori,
Group manager, Coordinator

Mervi Pajula,
Substitute for coordinator

Proftest Syke is proficiency testing provider PT01 (SFS-EN ISO/IEC 17043:2023) accredited by FINAS (Finnish Accreditation Service, finas.fi/sites/en).

Proftest Syke guide for participants is available on Proftest Syke website (syke.fi/proftest/en).

ProftestWEB is the electronic client interface for Proftest Syke proficiency tests wwwp5.ymparisto.fi/Labtest/en. Within the pages, instructions are available on every page. A short *Getting started* manual is available on ProftestWEB front page.

Organising the proficiency test

1 Organiser

Proftest Syke, Finnish Environment Institute (Syke)
Address: Mustialankatu 3, FI-00790 Helsinki, Finland
Email: proftest@syke.fi

Contact

Coordinator: Mirja Leivuori, tel. +358 295 251 366
Substitute for coordinator: Mervi Pajula, tel. +358 295 252 320
Email: firstname.lastname@syke.fi

Cooperation partner

Eurofins Environmental Testing Finland Oy, Jyväskylä (T039, finas.fi/sites/en)

Analytical expert

Minna Salonen, Eurofins Environmental Testing Finland Oy, Jyväskylä
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Subcontracting

KVVY Tutkimus Oy (T064, finas.fi/sites/en): Sample material homogenisation and dividing into subsamples.

Eurofins Environmental Testing Finland Oy, Jyväskylä (T039, finas.fi/sites/en): Homogeneity testing of the samples.

2 Sample and measurands

The sample matrices in this proficiency test are peat, wood pellet, biofuel (stem wood, 1.1.3: SFS-EN ISO 17225-1), and coal. Samples are dried and the sample amount is about 20 g. Samples and measurands are presented in Appendix 1.

3 Registration

The registration for this proficiency test is open until **19 August 2026**.

Registration is done via the electronic client interface, ProftestWEB: wwwp5.ymparisto.fi/Labtest/en. If there are problems when using ProftestWEB or you need username and password, please contact proftest@syke.fi.

4 Sample delivery

The sample dispatch day for national participants is **1 September 2026**. To ensure timely arrival, the samples are dispatched earlier for participants abroad.

If the sample package does not arrive **at the latest on 4 September 2026**, or there are missing and/or broken sample containers, please contact the provider immediately (proftest@syke.fi). More contact details in Chapter 1 *Organiser*.

5 Sample storage and analysis

The delivered samples are air dried at room temperature, and they should be kept dry and at room temperature before measurements. **Samples are analysed within the laboratory where they are delivered to. Analyses are conducted according to the participant's normal procedures.** Replicated analyses should not be done more than according to the method of analysis or the instructions within the sample letter.

Samples are to be homogenized before measurements. **Moisture content of the analysis sample should be measured first after storing samples for one day in the measuring laboratory (= the reported moisture content of the analysis sample M_{ad}).** Moisture content of the analysis should be measured, additionally, during every measuring day. This is important in order to eliminate the influence of humidity from the measurement results.

Additionally, participants should estimate or calculate **the emission factor (EF) for the analysed peat and coal samples as on received basis.** The total **moisture contents as received (M_{ar})** will be given for the samples by Proftest Syke alongside sample delivery.

Timetable for analyses is given on the front page of this letter.

6 Reporting the results

The participant results are reported to Proftest Syke at the latest on **5 October 2026**. The results are to be reported on **dry weight basis.**

An electronic survey about the methodological backgrounds shall be reported to Proftest Syke together with results.

Proftest Syke delivers the preliminary results report to the participants at the latest in the week 43 (19 – 23 October 2026). The final report will be published at the latest in March 2027 and it is then available on ProftestWEB and on Proftest Syke website (syke.fi/proftest/en). The availability of the report will be informed to the participants by email.

7 Assigned values and evaluation of the results

Either the calculated concentration (synthetic samples) or the robust mean, the median, or the mean of the results reported by the participants will be used as the assigned value for the measurand. The calculation of the assigned value is based on the results reported according to the given guidelines. Also, when needed, the result of the expert laboratory can be used as the assigned value. The evaluation of the results will be based on z scores. The preliminary standard deviation for proficiency assessment will be given in the cover letter of the sample. In special cases also E_n or D% scores can be used for the performance evaluation.

8 Confidentiality

The results of participants are treated anonymously. The participants' results and the preliminary results report of the round are confidential and should not be shared with third parties during the implementation of the round.

9 Participation fee

The participation fee is **995 €** (+ VAT) including all measurements and samples. The basic fee is **440 €** (+ VAT) and the fees for each sample are as follows:

Sample	Price, € (+ VAT)
Peat B1	135
Wood pellet B2	140
Biofuel B3 (stem wood)	140
Coal K1	140

The invoice will be sent after the delivery of the preliminary results report. If the participant orders additional samples, they are charged according to the prices listed above.

Note! In Finland the current VAT is 25.5 %. Furthermore, if the delivery or invoicing address, or any other additional information needs to be corrected after the first sample delivery or after invoicing, an extra handling charge will apply. The participant is also responsible for possible custom clearance or customs fee of the sample.

10 Appendices

Appendix 1 Samples and measurands

Appendix 1. Samples and measurands

Sample	Sample type	Measurands
B1	Peat	Gross calorific value ($q_{V,gr,d}$) Net calorific value ($q_{p,net,d}$) C_d, Cl_d, S_d, H_d, N_d Analytical moisture content of the sample (M_{ad}) Ash content (Ash_d) Volatile matter (V_d) Emission factor (EF)
B2	Wood pellet	Gross calorific value ($q_{V,gr,d}$) Net calorific value ($q_{p,net,d}$) C_d, H_d, N_d Analytical moisture content of the sample (M_{ad}) Ash content (Ash_d) Volatile matter (V_d)
B3	Biofuel (stem wood)	Gross calorific value ($q_{V,gr,d}$) Net calorific value ($q_{p,net,d}$) C_d, S_d, H_d, N_d Analytical moisture content of the sample (M_{ad}) Ash content (Ash_d) Volatile matter (V_d)
K1	Coal	Gross calorific value ($q_{V,gr,d}$) Net calorific value ($q_{p,net,d}$) C_d, Cl_d, F_d, S_d, H_d, N_d Analytical moisture content of the sample (M_{ad}) Ash content (Ash_d) Volatile matter (V_d) Emission factor (EF)