



**OPEN CALL FOR
ADDITIONAL EXPERIMENTS FOR SAMPLE TREATMENT
CEN/TC 454 'Algae and algae products'**

Specific agreement: SA/CEN/2016-04/ENER/C2/498-2016/SI2.735225

Background:

The European Commission (EC) and CEN have signed a contract (SA/CEN/2016-04/ENER/C2/498-2016/SI2.735225) under the Framework Partnership Agreement 2014. The project is titled: "Algae or algae based products or intermediates" and is related to the Standardization Request M/547 as regards algae and algae-based products or intermediates.

The objective of the project is to develop standardization deliverables in the Technical Committee **CEN/TC 454 'Algae and algae products'**, which was established in the beginning of 2017.

CEN/TC 454, working group 6 'Test methods' is currently developing a CEN standard (working title: "Algae and algae-based products or intermediates – Methods of sampling and analysis – Sample Treatment"). The scope of this standard about **sample treatment of wet and dry samples** is to develop a standard method on drying techniques available, used for seaweed samples. By implementing this method, the analysing laboratories are able to report the most true dry weight percentages, and to obtain samples as most representative as possible for further examination.

Objective:

Knowing that not all analysing facilities have the possibility of a freeze-dryer apparatus, CEN/TC 454/WG 6 has identified an additional technique, namely **vacuum drying**, additional to **freeze-drying** and **oven-drying**, which should also be incorporated in the standard to be developed. For this reason additional experiments are foreseen, resulting in data, which will enable us to compare the different techniques. From the additional experiments and data obtained, the planned experiments will need to prove both drying techniques can be used. Intermediate (and final) findings will be exchanged with CEN/TC WG 6 on regular basis. The additional experiments enable CEN/TC 454/WG 6 to prove that the difference between the two techniques, which are to be incorporated in the new standard are small. This prove will be a justification of the results of standardization work on this topic currently performed.

Tasks to be performed:

- a) Planning the several activities & logistics of the tests to be performed;
- b) Performing freeze drying tests and stove drying tests on 4x10 samples (red, brown, green, and micro-algae);
- c) Performing stability tests after defrosting the samples;
- d) Preparing a report on the test results and on the difference in dry weight content and the stability after storage;
- e) Preparing a standard method based on the standards already available.

Time schedule:

Deliverable	Period
Start	Q3 2018
Status/update report	Every quarter
Performing tests	Q3 2018
Concept report and draft standard	Q4 2018
Draft ready for enquiry and final report	Q2 2019

Costs:

A budget needs to be provided, containing a division in:

- Labour costs;
- Consumables (including buying and sending samples);

Note 1: These costs are added separately to every invoice;

Note 2: Prices excl. VAT.

The offer shall be specific on the costs of the project as described above, including the expected time. Consortium offers will also be considered. Offers can also be from a single person, which should however have a VAT number and a company registration.

Selection procedure:

The selection of the candidate who will perform the experiments will be made by a selection panel, which is composed of:

- Mr. Timo de Groot (NEN), “Co-“secretary of CEN/TC 454 'Algae and algae products';
- Mr. Bert van Asselt, Chair of CEN/TC 454 'Algae and algae products';
- Representative of (CCMC)(t.b.d.).

Lab specifications:

The to be selected lab should:

- Have extensive experience with freeze drying and stove drying techniques on organic materials;
- Have access to a vacuum drying installation and dryingstove.

Selection criteria for the tendering process:

Selection of contractors will be based on the following criteria:

1) Documented experience (maximum 50 points):

- experience in running European or/and international test programs;
- extensive experience with freeze drying and stove drying techniques on organic materials.

2) Organization; demonstration of ability and understanding of the project (maximum 40 points):

- facilities used for the actual testing;
- organization for the reporting to NEN;
- access to a vacuum drying installation and dryingstove.

3) Quotation price and detail (maximum 10 points)

Additional points may be awarded if the tenderer can add additional value to the project. In general, a best value for money principle will be applied.

Only offers that pass the selection criteria of scoring minimum 35 points under 1) and 25 points under 2) are eligible for selection.

NEN considers that proposals requesting a budget of +/- **€15 000 (excl. VAT)** would allow the study to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

On the effective contract the "General Terms and Conditions for the Provision of Technical Services to NEN" shall apply. A copy of those can be delivered on request. The Contractor should also agree to the fact that the obligation of NEN to pay is subject to the normal functioning of the financing mechanisms of the Commission of the European Union and of the EFTA, also applicable to specific agreement SA/CEN/2016-04/ENER/C2/498-2016/SI2.735225.

Replies to tender:

- Applications should be submitted using the hyperlinked [application form](#) (answer to a call for Tender in compliance with FPA 2014) by 6 August 2018. Applications received after the deadline will not be taken into consideration.
- Applications shall be sent by e-mail to timo.degroot@nen.nl or indra.teronde@nen.nl.
- If necessary, additional information can be obtained via the CEN/TC 454 Secretary, Mr. Indra te Ronde (t: +31 15 2690 326, e: timo.degroot@nen.nl or indra.teronde@nen.nl).
- Candidates are herewith informed that interviews with the selection panel (by telephone/GoTo meeting) will be scheduled **on 7, 20 and/or 21 August 2018**