Interim report

NEa assessment sustainability biomass supplied from Estonia

1. INTRODUCTION

1.1. Reason for this assessment

In July 2021 SOMO published the report 'Wood pellet damage' (<u>Wood pellet damage - SOMO</u>). This report describes 25 areas (of which one area was not considered to be applicable) which, according to SOMO do not comply with the Dutch requirements for sustainability. As a result, according to the SOMO report, unjustified subsidies for solid biomass would have been paid to those Dutch energy producers who have received and consumed this biomass.

The State Secretary of the Ministry of Economic Affairs and Climate Policy promised an assessment following questions from the Dutch parliament.

In a reaction to the SOMO report the energy producers asked for a peer review from the research company Indufor (<u>Onderzoek weerlegt claim milieubeweging: Biomassa voldoet aan</u> <u>duurzaamheidseisen - Energie-Nederland</u>). Indufor concluded in a report dated 27 September 2021 that "the allegated cases of non-conformity presented in the SOMO report have no basis. The overall language used in the SOMO report is exaggerating and misleading and some of the statements lack the generally agreed cause-effect relationships." Also Indofur emphasizes that "the issues are complicated and there is a lot of space for discussion and different interpretations of the regulations and criteria."

1.2. Role NEa

Solid biomass used for energy consumption in the Netherlands must comply with legal sustainability requirements in order to be subsidized. Demonstrating sustainability is done via a system of certification and verification where various independent private supervising entities play a role (also refer to chapter 3.1). The Dutch Emission authority ("NEa") is the public entity supervising this system of private supervision since 2019 for the chain of custody and since 2020 for forest sustainability as well. By doing this, the NEa is giving additional assurance that the private supervision system functions adequately leading to the conclusion that the biomass supplied can be considered sustainable.

2. MEETING DUTCH SUSTAINIBILITY REQUIREMENTS

2.1. How to demonstrate sustainability

Dutch energy producers that are eligible for the SDE+ subsidy will need to demonstrate, on an annual basis, that the solid biomass they use for energy production complies with the legal sustainability criteria. Certificates, originating from voluntary certification schemes that are approved by the Dutch Minister, can be used for this purpose. A Conformity Assessment Body ("CAB"), recognized by the Dutch Minister, issues such certificates.

Depending on the biomass category, more or less sustainability requirements are applicable. Refer to the table below for an overview of applicable requirements depending on the biomass classification:

| Requirements | Biomass classified as forest product ¹ | Biomass classified as residue product ² |
|--|--|--|
| Greenhouse gas emission savings and calculation | \checkmark | \checkmark |
| Carbon and land use change | \checkmark | |
| Sustainable forest management | \checkmark | |
| Chain of custody | \checkmark | \checkmark |

¹ All biomass coming directly from the forest

² All biomass being a biogenous waste and residue product

The logic behind not requiring claims of residue products to comply with forest management and carbon and land use requirements is that this biomass is the inevitable result of the timber industry. As the main product is not biomass for energy but planks there are no further requirements on sustainable forest management regarding the biomass.

The Dutch requirements define all biomass coming from the sawmill, the sawdust, as a residue. Please note that it is required that the CAB checks if the biomass is coming from a sawmill and therefore can be considered a residue product. Please note also that the risk is considered low that a complete tree is shredded into biomass due to the price difference between timber wood and biomass. Further a CAB is to make sure that the volume of sawdust in a sawmill makes sense.

Part of the sustainability requirements is that the Dutch sustainability requirements require the application of a mass balance method. A mass balance makes the chain of custody transparent however does not require that the sustainable biomass is physically segregated from non sustainable biomass. Thus based on the mass balance method, non-certified biomass and various categories of biomass can be physically mixed.



an example of a chain of custody

2.2. Risk based approach

For small forest owners (< 500 ha) a growth path has been developed to stimulate the certification of this group. For a limited transition period, which is until 2023, these small scale forest owners in a specific region are given the possibility to demonstrate compliance with the requirements relating to carbon and land use change and sustainable forest management through a risk based approach at the biomass producer. This means that the biomass producer will need to produce sufficient evidence to demonstrate that the initial or residual risk level is "low" for each criterion as defined under these two requirements. For each criterion with a higher risk level in the relevant region, mitigation measures must be implemented by the biomass producer. These measures must be effective and be monitored by the biomass producer in such a way that the risk of non-compliance is reduced to a "low" level.

2.3. Approved certification scheme small forest owners

The certification scheme "SBP Instruction Document 2E: SBP Requirements for Risk Based Approach for Biomass Category 2. Version 1.0, September 2019" ("SBP ID2E") is approved by the Minister to be used for demonstrating sustainability for biomass through a risk based approach. Only the sourced biomass from forests which are defined as 'small' may be certified against SBP ID2E. The biomass producer, being the certification holder, is to implement this risk based approach.

3. CERTIFICATION

3.1. Roles and responsibilities

Economic operator

When certified biomass is supplied each economic operator in the sustainable biomass supply chain has to be certified to the relevant scope of that certification scheme. Each economic operator (being the certificate holder) is responsible for implementing all the requirements for sustainability in order to qualify for certification.

Conformity Assessment Body (CAB)

An accredited independent CAB performs the certification activities in order to issue a certificate to an economic operator. The CAB will check if the certificate holder has adequately complied with all requirements included in the certification scheme. The CAB has to be recognized by the Dutch Minister in order to perform certification activities.

Scheme owner

The certification scheme owner is responsible for drafting the certification scheme including requirements for sustainability and how these requirements are to be met. The certification scheme has to be approved by the Dutch Minister in order to be used for meeting the Dutch sustainability requirements. Only schemes that meet all or part of the Dutch sustainability requirements are approved. Well known forest certification scheme owners are FSC, SBP, PEFC. The scheme owner is a non profit organization who is in charge of keeping the certification scheme up to date and making certification process as well as the certifications and reports transparent.

Accreditation body

The accreditation body assesses if the CAB's performance in implementing their certification system is in accordance with all relevant requirements. These requirements encompass the certification requirements as well as a more general ISO standard³. Well known accreditation bodies are the "Raad voor Accreditatie" and Assurance Services International "ASI".

NEa

The NEa is legally assigned as public supervisor on the correct functioning of the above system. The NEa supervises, based on signals and on a sample basis, the work performed by the CABs. The NEa makes use of the work performed by the independent scheme owner and the accreditation body. In this way the NEa gives additional assurance that the system functions adequately and as a result the biomass supplied can be considered sustainable. The role and task of the NEa is accordingly described in the Dutch legislation.

3.2. Basics certification

The CAB assesses if the certificate holder complies with the scheme requirements. A certificate is issued for a period of multiple years but includes annual surveillance audits. Certification activities include conducting adequate and appropriate sampling and review of sites, documents, management records, interviews, consultations with stakeholders and direct observations. In case of conformity with the scheme requirements, the certificate holder is allowed to issue sustainability claims with its deliveries of biomass. Certification implies that non conformities may exist and in practice this is quite common. The CAB shall identify and evaluate each non-compliance to determine whether it constitutes a minor or major non-compliance. Non-compliances shall result in corrective actions, and, in some cases, suspension or withdrawal of the certificate. The latter shall (for most certification schemes) occur in case there is insufficient addressing of major non conformities or in case the non conformities are considered a breakdown of the certificate holder's system. The certificate holder is to take adequate action to limit or eliminate the negative effects and improve its process to prevent re-occurring. Certification further implies that the CAB takes samples in order to assess the system and procedures of the certificate holder. Certification auditing is risk-based, meaning that the most important and risky sustainability criteria are more often addressed during the audit. Further it is sample based meaning that not all certified deliveries are verified with supporting documentation. The certification holder may claim sustainable biomass under the certification scheme if existing procedures are adequate and checks supporting the correct functioning of these procedures are verified by the CAB.

3.3. Certification via a risk based approach

Certification based on a risk based approach means that the biomass producer is to gather and evaluate all information in order to make a risk assessment for each criterion under a requirement. In case the outcome of the risk is 'low' it implies that the risk is considered low that non compliances will occur for this criterion. It is the task of the CAB to evaluate the risk assessment performed by the biomass producer. Especially it should be evaluated if there is sufficient and relevant information available that substantiate a 'low' risk; and in case of a substantial risk the mitigation measures are adequate and are to be tested. A risk based approach implies that the CAB will make field visits when 1) signals/indications need to be verified (that may imply a non conformity and thereby a higher risk); or 2) mitigation measures are to be tested for which a field visit is necessary. In case it can be substantiated that a low risk exists of non compliance, no further certification activities/ evaluations need to be done. It is important to notice that a risk

³ ISO/IEC 17065:2012

based approach requires less certification activities and thereby less assurance then a full certification.

As part of the certification process, both the biomass producer and the CAB need to consult relevant stakeholders. The biomass producer determines which stakeholders to consult. The outcome of the consultations with stakeholders are an important source of information for the risk assessment. The CAB is to evaluate the work done by the biomass producer and to perform a stakeholder consultation itself as well. The CAB shall review all submissions and evaluate those that are relevant. All submissions shall be recorded and the CAB shall document actions taken in relation to relevant submissions, and the conclusions of the CAB regarding the risk assessment of the biomass producer.

4. BIOMASS FROM ESTONIA

In 2019 and 2020 Dutch energy producers purchased biomass from Estonia.

In 2019 the Dutch legal sustainability requirements were not applicable for demonstrating forest sustainability. Forest sustainability schemes were approved starting from 2020 when in compliance with the Dutch legal requirements. As the SOMO report has "the aim to ascertain whether wood pellets used for co-firing in Dutch power plants are produced in compliance with the Dutch criteria for sustainable biomass", we have considered the 2019 deliveries to be irrelevant. In 2018 and 2019 subsidies were granted for all biomass supplied under the claim of FSC or PEFC. Please note that these schemes have not been approved by the Netherlands to demonstrate forest sustainability for Estonia.

In case it is considered relevant that the NEa investigates if the 2019 claims were done on solid grounds (if the FSC and PEFC certification was performed adequately) this should be done separately.

In 2020 the biomass was either purchased with the claim for the category residue product or the claim SBP ID2E. A claim for the category residue product means that only compliance with the requirements for the greenhouse gas emission savings and calculation and chain of custody is required. A claim for the SBP ID2E product means that further to the greenhouse gas emission savings and chain of custody also compliance with carbon and land use change and sustainable forest management requirements is required. A SBP ID2E claim further means that only sourcing from small forest owners may take place.

The Estonian Graanul Invest group is operating pellet mills in Estonia, Latvia, Lithuania and the US. Graanul is an important supplier of biomass to the Netherlands and also supplies to many other countries. Graanul's management system is centralized through the head office with material controls at pellet mill level. Graanul Invest AS – Imavere Factory, Osula Graanul OÜ, Helme Graanul OÜ and Ebavere Graanul OÜ are certified for 'SBP ID2E' since end of February 2020.

NEPCon OU trading as Preferred by Nature ("Nepcon") is the certifying CAB of the Graanul pellet mills. The Dutch Minister of Economic Affairs and Climate Policy has recognized Nepcon on 22 November 2018 for an indefinite period for performing certification activities.

- 5. IMPACT SOMO
- 5.1. Sustainability violations SOMO report

The SOMO report describes logging in areas in the period 2014 - 2021, which would violate the following Dutch sustainability requirements:

- Criterion 7.1: Sites with high conservation value and representative areas of forest types occurring within the forest management unit are mapped, inventoried, protected and, if possible, enhanced. The sites can include one or more of the following values: species diversity, ecosystems and habitats, ecosystem services, landscape ecosystems and cultural values);
- Criterion 8.1: The soil quality of the forest management unit is maintained and if necessary improved, with special attention to coasts, riverbanks, erosion-sensitive areas and sloping landscapes;
- Criterion 8.2: The water balance and quality of groundwater and surface water in the forest management unit and downstream shall at least be maintained and where necessary improved;

- Criterion 3.1: Biomass is not sourced from permanently drained land that was classified as peatland on 1 January 2008, unless it can be demonstrated that the production and harvesting of the biomass does not result in water depletion of a previously undrained soil.
- Criterion 4.1: The forest management unit where the wood is sourced is managed with the aim of retaining or increasing carbon stocks in the medium or long term.

All these criteria relate to the carbon and land use change requirements and the sustainable forest management requirements.

5.2. Impact signals from SOMO

The SOMO report describes 24 areas in Estonia that may not comply with the Dutch sustainability requirements. The question is if any of these areas were sourcing areas under SBP ID2E certification as biomass under SBP ID2E, contrary to the category residue, must comply with the carbon and land use change requirements and the sustainable forest management requirements which are violated according to SOMO. This assessment is performed under 6.1.

The SOMO-report is a signal of non-sustainable forest management on the topics:

- Safeguarding of Woodland Key Habitats
- Safeguarding of Natura 2000
- o Safeguarding of threatened animal species
- Safeguarding of cultural values (cross trees)
- o Safeguarding of watersheds
- Safeguarding of peatlands

which may imply a non-conformity and therefor is to be taken seriously. Certification according to a risk based approach should include signals of non sustainable forest management in its risk assessment. The SOMO report is to be seen as a source of information that impacts the risk assessment. Obviously, these signals imply a higher risk for the various sustainability requirements. As a result, it should be expected that the CAB is doing additional efforts to assess if the signals are actually a non-conformity. In case it is not, the impact on the risk assessment is nil. In case it is, the biomass producer is to take mitigation measures that limit or eliminate the negative effects and prevent the non-conformity to re-occur. The CAB is to test the adequacy of these mitigation measures. In case the biomass producer is systematically violating sustainability requirements or is not effectively addressing major non conformities the certification is to be withdrawn.

- 6. NEa ASSESSMENT
- 6.1. Has purchasing taken place by Dutch energy producers from the SOMO areas for which the Dutch forest sustainability requirements apply?

In 2019 there was no purchasing from Estonia by Dutch energy producers of biomass for which the sustainability schemes had to be in compliance with the Dutch sustainability requirements for forest. Please refer to chapter 4.

In 2020 the energy producers consumed a total volume of 2,244,183 tons biomass in the Netherlands. A total volume of 294,836 tons was purchased in 2020 from Estonia. Of this 294,836 tons a total of 115,381 tons was supplied as a residue product. A volume of 179,455 tons was supplied to Dutch energy producers under the certification scheme SBP ID2E for which the carbon and land use change requirements and sustainable forest management requirements apply. Together this is 13% of the total consumed volume of biomass in the Netherlands in 2020. The suppliers of this biomass concerned two pellet mills: Graanul Invest Imavere Factory and Osula Graanul.

SBP ID2E certification of Graanul took place end of February 2020. This means that only sourcing that took place as of end of February 2020 could qualify as SBP ID2E certified biomass.

To comply with SBP ID2E certification two requirements need to be met:

1) Area of supply is smaller than 500 hectare;

2) Area of supply meets the Dutch sustainability requirement for which a risk based approach may be used.

SOMO mentions 24 areas in which compliance with Dutch sustainability requirements were questioned. We checked for these 24 areas if:

logging took place after end of February 2020;
the area is smaller than 500 hectare.

- SOMO describes 25 areas of which one area could not be considered as an example of actual non-compliance. This leaves 24 areas.
- Of these 24 areas 12 areas describe logging activities that took place prior to end of February 2020 and therefore do not qualify for the first condition.
- Of the remaining 12 areas, 9 areas are State Forest Management "RMK" property which is categorized as an area where the forest management plan is managed over a larger scale and therefore does not qualify for the second condition.
- One area describes the issue of an unjustified issuance of a felling permit, however the SOMO report does not describe any felling from this area. This was confirmed by Graanul.
- The two remaining areas show that the last harvesting permit was issued in 2019. The Environmental Inspectorate confirmed that there was no violation of logging in these areas.

Therefore, it can be concluded that it is very unlikely that these areas can be linked to SBP ID2E certification and as a result it can be concluded that it is very unlikely that the logging in the SOMO report areas can be linked to puchasing of biomass by Dutch energy producers for which the Dutch sustainability requirements as referred to in the SOMO report are violated.

It could be true that there have been biomass physically sourced in the SOMO areas that has ended up in the Netherlands as:

- Biomass that qualifies as residue product does not need to comply with the Dutch sustainability requirements being violated according to SOMO. It could be that there had been sourcing in the SOMO areas which ended up in the sawmill and from there to Graanul and the Netherlands;
- Based on the mass balance method (which is a common method in forest sustainability certification) physically mixing of various categories of certified biomass is allowed (please refer to paragraph 2.1 for information on the mass balance method).

Therefore, the wordings in the SOMO report "may be linked", "likely to be linked", "may end up" are not incorrect.

Irrespective of the above conclusion the certification for SBP ID2E should take into account the SOMO signals in its risk assessment and evaluation. One may still conclude that the certification for SBP ID2E is on incorrect grounds if signals have not been investigated properly resulting in an incorrect risk assessment (refer also to paragraph 6.2 for an explanation why this is relevant and the work done). If this would be the case it may lead to the conclusion that the purchased biomass under SBP ID2E were certified on incorrect grounds.

6.2. Has the CAB performed its certification work adequately for SBP ID2E certification of Graanul?

Certification according to a risk based approach should include signals of non sustainable forest management in its risk assessment. The risk assessment for SBP ID2E covers the complete area of Estonia and not only the areas from which sourcing takes place. The SOMO report is a signal that is to be taken seriously that there are substantial risks that the sustainability requirements for the Netherlands (as included in SBP ID2E) are not met. Obviously, these signals imply a higher risk for the various sustainability requirements. As a result, it should be expected that the CAB is doing additional efforts to assess if the signals are actually a non-conformity. Therefore, it is relevant and important that the NEa assesses if the certification SBP ID2E of Graanul performed by Nepcon is issued on correct grounds in February 2020 as well as in June 2021. In order to evaluate Nepcon's certification activities NEa assessed all certification activities except for the stakeholder analyses. NEa decided to outsource the evaluation of the stakeholder analyses to a third party with knowledge on forest sustainability certification and stakeholder assessments.

The stakeholder analysis performed in February 2020 shows that many of the topics in the SOMO report were already brought forward in the context of the certification for SBP ID2E. The question arises if Nepcon has adequately evaluated the input from the stakeholders. This is an important

and relevant question to be answered because it addresses the concerns described in the SOMO report.

6.2.1. Third party assignment stakeholder analyses

The certification is a risk based assessment to be performed by Graanul. It is Nepcon's role to evaluate the risk assessment. The risk assessment starts with information gathering. Part of the information is the input from stakeholders. The stakeholders analyses process according to SBP ID2E is as follows:

- 1) Graanul performs a stakeholder analyses;
- 2) Nepcon evaluates that the comments from stakeholders were adequately addressed by Graanul (meaning assessing impact on risk assessment yes or no);
- 3) Nepcon performs a stakeholder analyses as well;
- 4) Nepcon evaluates if the comments from stakeholders have an impact on risk assessment yes or no.

In order to assess the work done regarding the stakeholders analysis a third party with expertise on forest sustainability certification and stakeholders analyses was asked by NEa to assess the work done by Nepcon on this aspect. The third party's assignment is twofold:

- 1) Assess the work performed by Nepcon described above under 2, 3 and 4. The assessment includes if input was evaluated with sufficient thoroughness;
- 2) Perform a stakeholders analyses as well focusing on the topics described in the SOMO report. The third party will compare the outcome of the stakeholders analyses (being the effect on the risk analyses) with the outcome from Nepcon.

The stakeholder analyses will include the work done by Nepcon for the certification work in February 2020 as well as the work done in the autumn 2021 (follow up audit certification (refer to Nepcon's response in paragraph 6.3)). We have decided to perform a stakeholder analyses under the authority of NEa among others to have all relevant stakeholders, among which local Estonian NGOs, the opportunity to raise their concerns and to evaluate to what extent these concerns were adequately dealt with. Adequately in this respect means:

- a. Have all stakeholders been approached that should have been approached (sufficient representative)?
- b. Have stakeholders been approached with the correct question (was it sufficient clear what was asked from them?)
- c. Has Nepcon evaluated the input from the stakeholder analysis adequately?
 - i. Are signals investigated sufficiently?
 - ii. How was the input from stakeholders evaluated (effect on the risk assessment yes or no?)
- d. Is it sufficient transparent for the stakeholders what was done with their input?

6.2.2. NEa assessment of certification Nepcon

Apart from the stakeholder analyses NEa assessed all other elements which are part of a SBP ID 2E certification in February 2020 as well as in June 2021. The objective was to assess if Nepcon has performed its certification procedures for SBP ID2E for certification holder Graanul Imavere factory and Osula Graanul according to the appropriate standards.

The overall conclusion was that "Based on the work performed by NEa which includes, among others, the interviews with Nepcon and Graanul and assessment of documentation and verification of the gate software, it can be concluded that Nepcon has performed its certification procedures for SBP ID2E for certification holder Graanul Imavere factory and Osula Graanul according to the appropriate standards. However please note that an important element of the certification activities is the stakeholder analyses. The assessment of this element is still outstanding and may impact the overall conclusion."

Please refer to the annex for the report of the work done and conclusions drawn.

6.3. Have all private supervision bodies taken adequate action following the SOMO report?

The private supervision bodies refer to Nepcon in its role as CAB, ASI in its role of accreditation body and SBP in its role of scheme owner. NEa asked all three private parties in July 2021 for their reaction to the SOMO report. More specifically, NEa asked the extent to which the requirements of the certification standards of SBP have been violated according to their knowledge. Further, in case of violation, what actions will be undertaken.

Nepcon, in short, answered that they have concluded that, while most of the SOMO comments (except the cross trees) were already received and properly investigated in their previous certification audit, they take this report seriously and will deal with them during the next audit which will be planned shortly.

ASI in short answered that they will increase their oversight activities in the Baltics. ASI later on informed us that they will perform a desk review at the end of the year/start of the new year when Nepcon's certification activities for the next audit are finalized.

SBP has contacted both ASI and Nepcon and has requested both to review the incident and come back with an action plan.

According to the NEa, all private supervision bodies planned adequate follow up actions. It is important to assess if the work done by Nepcon in February 2020 with respect to the stakeholder analyses is sufficient as they mention that these concerns were already properly investigated. This will be answered in the third party assignment.

Furthermore, NEa approached the Estonian Environmental Board/Environmental inspectorate. The Environmental Inspectorate confirmed that for one area in the SOMO report, felling of the cross trees of Partsimõisa, had taken place. This illegal felling turned out to be possible because this specific object was shifted on the map layer due to an IT error. Further in the case of Vastsekivi stream, the Environmental Inspectorate identified a violation of the conditions for felling (storage of fellings residues in the water protection zone, which was rectified afterwards) and imposed a penalty on 04.07.2019. The Environmental Inspectorate checked in September/October 2021 the compliance with the logging permit by Graanul and confirmed that no violations were noted.

7. WHAT'S NEXT

Although it can be concluded that it is very unlikely that the logging in the SOMO report areas can be linked to sourcing of biomass by Dutch energy producers for which the Dutch sustainability requirements as referred to in the SOMO report are violated, final conclusions at this stage cannot be drawn. Nepcon will perform a follow up certification audit including a stakeholder analyses. This report is expected in January 2022. After finalization of the Nepcon certification work ASI will report its review on the Nepcon certification activities. Also NEa will have a third party perform a stakeholder analyses. The timing of the ASI and the third party reports are expected in March/April 2022. After all assessments are available the NEa will report its final conclusions.