

Final 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' ([Wood pellet damage - SOMO](#)). This report describes 25 areas 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.

In a reaction to the SOMO report the energy producers asked for a peer review from the research company Indufor ([Onderzoek weerlegt claim milieubeweging: Biomassa voldoet aan duurzaamheidseisen - Energie-Nederland](#)). Indufor concluded in a report dated 27 September 2021 that "the alleged 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."

The Ministry of Economic Affairs and Climate Policy promised an assessment following questions from the Dutch parliament. The Dutch Emission authority ("NEa") has carried out this assessment.

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. The NEa is the public entity supervising this system of private supervision. 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.

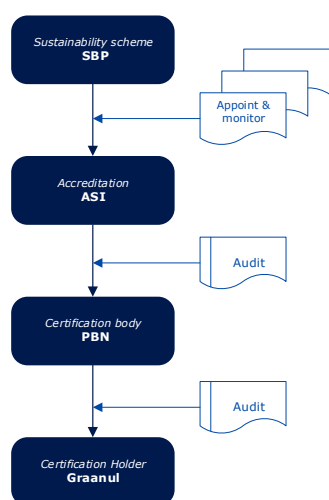
2. INTERIM REPORT

End of December 2021 the NEa sent an interim report to the Ministry. This interim report described the work done by NEa and resulting findings to date and the process ahead. The main conclusions were:

- 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.
- Given this agreed system the NEa will verify if certification to the Estonian pellet mill Graanul was granted according to the approved certification norm.
- The issues described in the SOMO report all relate to sustainable forest management. The biomass supplied from Estonia to the Netherlands, for which these sustainable forest management norms are to be met, relate to the so called 'SBP ID2E certification'. Biomass under this certification may solely be sourced from small forest management units "FMUs". The Estonian biomass supplier Graanul was first certified in February 2020 for SBP ID2E certification.
- The NEa verified if any of the areas in the SOMO report were either small FMUs or described logging took place after February 2020. The resulting conclusion is that it is very unlikely that the areas mentioned in the SOMO report can be linked to this specific certification scheme. As a result it can be concluded that it is very unlikely that the logging in the SOMO report areas can be linked to purchasing of biomass by Dutch energy producers for which the Dutch sustainability requirements as referred to in the SOMO report are violated.
- Irrespective of this conclusion it remains relevant to verify the signals from the SOMO report as the certification SBP ID2E is based on a risk based approach. These risks are

assessed for small FMUs with a scope of the whole country of Estonia. Therefore, it does not matter if signals of non compliance relate to a specific sourcing area or not.

- The NEa assessed if the SBP ID2E certification of Graanul performed by the certification body, NEPCON OU trading as Preferred by Nature ("PbN"), was issued on correct grounds in February 2020 and June 2021. Part of the certification process is to gather input from stakeholders. We noted that the stakeholder comments in February 2020 were on the same topics as the issues in the SOMO report refer to. An important question then is whether PbN had sufficiently addressed these comments.
- The NEa gave an assignment to an independent third party, INCAS, to assess the stakeholder consultation in the context of the Graanul certification. The assignment was to perform a stakeholder consultation themselves and evaluate whether PbN's stakeholder consultation was adequate both in terms of involvement of stakeholders as well as sufficient evaluation of stakeholder's input. Sufficient evaluation means that stakeholders comments are sufficiently investigated by the certification body. This evaluation is still outstanding.
- NEa's overall conclusion on the certification in February 2020 and June 2021 was that PbN had performed its certification procedures for SBP ID2E for Graanul according to the appropriate standards. However NEa's scope excluded the assessment of the stakeholder analyses which may impact the overall conclusion.
- Finally the certification body PbN, accreditation body ASI and scheme owner SBP were approached by the NEa and asked for their reaction to the SOMO report. SBP answered that they requested both PbN and ASI to review the SOMO report and come back with an action plan. PbN answered that they would deal with the SOMO report comments in their next recertification audit which was planned end of year 2021 – beginning of 2022. ASI answered they would perform a witness audit on the recertification activities of PbN. Also the Estonian Environmental Board/Environmental inspectorate checked any violation of all felling permits relating to the SOMO areas. It appeared that there was one violation due to an internal IT error by the Estonian government. Further there was one penalty due to violation of the conditions for storage of fellings.



See above a scheme showing responsibilities private supervision

This final report will address the following:

- Work performed and findings PbN from the recertification of Graanul ending February 2022 (chapter 3);
- NEa assessment of the work performed by PbN for the recertification audit excluding the stakeholder consultation (chapter 4);
- Findings and conclusions on the stakeholder consultation from the external party, INCAS (chapter 5);
- Findings from the accreditation body (chapter 6);
- Overall conclusion on work performed PbN and consequences biomass supplied to the Netherlands from Graanul (chapter 7).

In the appendices the interim report, the NEa assessment as well as the INCAS report are included.

3. REASSESSMENT CERTIFICATION FEBRUARY 2022

PbN has performed a reassessment certification audit for Graanul in November 2021 with certification decision on 23 February 2022. The certification is based on a risk assessment approach. Only in case requirements cannot be assessed as low to be violated, additional measurements are required. 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 based approach requires less certification activities and thereby less assurance than a non risk based certification¹.

Graanul as certification holder is to draft a risk assessment on all (Dutch) sustainability requirements. Graanul is to assess if, based on applicable laws, reports, implemented measurements etc as well as comments from stakeholders, risks can be assessed as low. If not additional measures need to be taken. PbN is to assess if Graanul has performed this risk assessment properly. As part of the recertification Graanul and PbN accounted both the SOMO report as well as the Indufor report as input to their stakeholder consultation.

Graanul concluded that there are two requirements which cannot be assessed as low. These are:

- 1) Sites with a high conservation value and representative areas of the forest types that are found in the forest management unit have been identified and are protected and where possible enhanced. The sites may contain one or more of the following values: diversity of species, ecosystems and habitats, ecosystem services, ecosystems at species landscape level and cultural values.
- 2) A forest management plan is drawn up which contains at least a number of criteria. These requirements were already assessed as not low in the previous certification audits in 2020 and 2021.

The SOMO report describes logging which would violate the following Dutch sustainability requirements:

- 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);*
- 2) *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;*
- 3) *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;*
- 4) *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.*
- 5) *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.*

Graanul concluded that the SOMO report did not lead to a change in risk assessment.

PbN concluded that Graanul's risk assessment was appropriate although some minor non conformities were raised. The most relevant non conformity in the context of the SOMO report was on the sustainability *requirements 2 and 3 above* (soil quality and water balance near water streams). Based on an assessment of presented examples it seemed that clearcutting had taken place up to the waterstreams (clear cutting is not allowed, whereas cleaning buffer zones is allowed). PbN concluded that Graanul could insufficiently demonstrate if this had or had not taken place. This non conformity was classified as minor and did not lead to a change in risk assessment.

¹ Note: as this certification relates to small FMUs a risk based approach was considered appropriate. This risk based approach is only applicable up to and including 2022. From 2023 onwards a non risk based certification is applicable for biomass originating directly from forests for all FMUs.

Graanul should take photos before and after cutting in critical cases which should make it clear that clear cutting had not taken place.

Also PbN did conclude that the SOMO report did not lead to a change in risk assessment.

4. NEA ASSESSMENT OF THE WORK DONE PBN RECERTIFICATION

Apart from the stakeholder consultation NEa assessed all other elements that are part of the recertification audit. The objective was to assess if PbN has performed its certification procedures for SBP ID2E for certification holder Graanul according to the appropriate standards. This implies an assessment if sufficient and appropriate information was gathered, if this information leads to the appropriate risk assessment and if measures are appropriate and were tested in case risk is not low. There is little documentation in the audit report on what PbN did to verify or evaluate Graanul's risk assessment.

Based on interviews and NEa's evaluation of risks we assessed that PbN has performed its certification procedures for SBP ID2E for Graanul according to the appropriate standards.

More specifically NEa assessed for the:

4.1 *Requirement 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) if the mitigation measure is appropriate, sufficient and tested by PbN.

In Estonia the so-called Woodland Key Habitat ("WKH") areas are identified as forest areas to be protected due to their high conservation values. Quite a substantial part of Estonia is not yet inventoried and mapped for WKH. The government has created a database including all the officially registered WKH areas. The Estonian NGOs have created a database with potential WKH areas. This potential WKH database covers all forest in Estonia. In order to become an official WKH area the site needs to be visited and assessed by an official forestry expert.

WKH areas covers plant life not birdlife. However, the WKH areas cover old growth forest which overlap with important nesting sites. Protected birds are protected via their own protection rules in Estonian legislation². Protection can vary between very strict to some management activities. PbN reviewed all SOMO examples on bird nesting by verifying what permit was given and if the logging was in line with the permit. There were no deficiencies. PbN stated that they have not found any indication that there would be significant reduction of population of endangered species due to forest management activity. The fact that wood is harvested in areas overlapping with bird habitats is not necessarily negative for the habitat (e.g. in case the harvesting is done outside the nesting season etc.).

Also Natura2000 areas can be considered high conservation value areas. All Natura2000 areas are mapped in a database. The Estonian Environmental Board³ may and had issued harvesting permits for Natura2000 areas in case habitats are considered sufficiently protected overall. Graanul will not and has not sourced from Natura2000 areas in the context of the SBP ID2E certification. From 2021 onwards Graanul will also not source from Natura2000 areas for the other SBP certification schemes. Based on European Directives an impact assessment is required before the issuance of a felling permit in Natura2000 areas. This assessment is not sufficiently taking place according to the European Commission in an infringement procedure which is still ongoing. In reaction to this infringement procedure the Environmental Board has decided to issue no longer felling permits for Natura 2000 areas as from Q1 2022.

Cross trees⁴ as well as natural sacred grounds are mapped. However, these inventories are not complete. Only in case these grounds and cross trees are identified and mapped they are protected. Anyone who identifies a cross tree can notify the Heritage Board to have the cross tree included on the map. The Heritage Board would then judge if indeed this tree can qualify

² Nature Conservation Act chapter 8

³ <https://keskkonnaamet.ee/en/wildlife-nature-protection/forestry>

⁴ In Estonia, 'cross trees' are an exceptional type of sacred natural objects that are connected to the funeral custom of carving crosses on a tree on the way to the cemetery to commemorate the deceased. [28.11.10225 \(2012\) Friend of the Year of Sacred Groves in Estonia is Mariju Kõivupuu - Maavalla Koda \(maavald.ee\)](https://www.friendoftheearth.org/en/2012/11/28/2012-Friend-of-the-Year-of-Sacred-Groves-in-Estonia-is-Mariju-Koivupuu-Maavalla-Koda-maavald-ee)

as a cross tree. As long as a part of Estonia is not yet inventoried for natural sacred grounds and cross trees there is a risk of felling activities in such an area or of such a tree.

The mitigation measures from Graanul are to check each incoming biomass supply at the gate with software that matches the unique FMU-ID with the following databases 'official list WKH', 'potential list WKH', 'natural sacred grounds and cross trees' and 'natura2000 protected areas'. Any sourcing from these areas is not allowed for the SBP ID2E certification and will be rejected for SBP ID2E certification. In case of doubt on the correct mapping a Graanul forestry expert does a field visit. PbN has tested the correct implementation of the gate software.

Based on the above NEa assesses the mitigation measures implemented by Graanul as appropriate.

4.2 Requirements 2 and 3 (soil quality and water balance near watersheds) if sufficient information was gathered and if this information supports a low risk for this requirement.

In the SOMO report various examples are described where clear cutting had taken place near water sheds. The Estonian Law on Water⁵ says that there is a water protection zone of 10 metres from the banks of rivers, streams and large ditches where logging is not allowed unless permitted by the Estonian Environmental Board except cutting carried out in artificial recipients of land improvement systems for the performance of work to manage land improvement systems. The Estonian Nature Conservation Act⁶ says that clear cutting in the limited management zone of the shore is prohibited. According to Graanul the SOMO examples all related to either maintenance activities or land improvement and were all approved by the Environmental Board.

PbN raised a minor non conformity on Graanul's risk assessment. "... *There is a difference between clearcutting and cleaning the buffer zones.*" (i.e. in order to manage the land improvement infrastructure or for removal on storm sensitive trees, fallen and damaged trees or removal on bush culture). PbN assessed "...*presented examples where it seems like the clear cuts were done up to the streams. It is ok to clean the areas but not to clear cut and it is not clearly described in the Risk Based Approach.*" Graanul will from 2022 onwards take photos before and after cutting in critical cases. PbN's evaluation did not lead to a change in risk assessment.

PbN assessed for all SOMO examples the felling permits, the inventory data, photos and maps and they conducted interviews with the responsible person. PbN concluded that cutting is allowed however according to the felling permit issued in order to clean the area. It is not clear if sometimes there was clearcutting in stead of cleaning. PbN verified with the Environmental Inspectorate that there were no big issues on clearcutting at watersheds. NEa verified with the Environmental Board that permits were given.

Based on the above and most importantly the confirmation that there are no structural violations of loggings near watersheds it seems reasonable that the risk was assessed as low.

4.3 Requirement 4 (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) if sufficient information was gathered and if this information supports a low risk for this requirement.

Drainage systems and peatlands are registered in a database. Estonian government has defined the protection of peatland areas according to their conditions.

Drainage systems are meant to increase the forest growth rate and productivity, to build forest roads or to have other benefits. New drainage systems are not built in the state forest according to the Estonian State forest⁷ nor are drainage systems reconstructed in protected forests. However, there can be exceptions. New ditches are built in a forest if these are essential for the building and reconstruction of roads. In protected forests and areas drainage ditches are cleaned that are necessary for the operation of drainage systems located in

⁵ chapter 5 paragraph 29

⁶ chapter 6 paragraph 37

⁷ Forest Improvement | RMK

management forests. According to Estonian law⁸ for any new or expansion of an old drainage system an environmental impact assessment is required both for state as well as for private forests. For repairing or renovating existing drainage systems an environmental impact assessment is not required.

According to Graanul the peatlands which were referred to in the SOMO report were already drained in the Soviet times and renovation of drainage systems is in line with best management practices in order to improve forest soil conditions and prevent erosion and upstream sediments. Further the carbon balance is not negatively impacted by these activities. PbN does not agree with Graanul about the impact on the carbon balance however considers these areas no longer as peatlands and therefore the risk for this requirement can be assessed as low.

The question to answer in the context of the SOMO comments is whether the peatlands that were drained in Soviet times and where now, in the context of reconstruction, maintenance activities take place, can be classified as peatlands as of today. According to PbN all peat has decayed. The forestry from former peatlands is now inventoried in the Forestry Registry database as a forest type and no longer as peatland.

Based on the above it seems reasonable that the risk was assessed as low. Main argument is the fact that there is a legal framework applicable for inventory and protection of peatlands and impact assessment for new drainage systems. The assessment whether former peatlands drained prior to 2008 and currently being renovated can still be considered peatlands as well as the impact of renovation of drainage systems on the carbon balance cannot be assessed by NEa and deserves more investigation.

4.4 *Requirement 5* (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) if sufficient information was gathered and if this information supports a low risk for this requirement.

Apart from the SOMO and Indufor reports and Estonian forest statistics, projections of the effects on carbon stock up to 2050 were included from the land use, land-use change and forestry (LULUCF) activities. The official reporting is however preliminary as the official reporting date is 1 January 2023. The NEa took note of the biannual GHG projections reported by each EU Member State to the EC⁹ as well as the National Forestry Accounting Plan Estonia 2019¹⁰. The statistics show a stable carbon sink from Estonian forests until 2030, however a decrease of carbon sink in the period 2030 – 2050. Upon 2050 the carbon sink from forest would increase again. In all these years Estonian forests remain a carbon sink.

According to the explanations given by the Estonian government¹¹ the Estonian forests are relatively old and the age distribution of the stands is uneven. Older trees capture less carbon as compared to middle aged trees. Further relatively old and mature trees lead inevitably to release of carbon. An even use of wood over decades is considered a desirable ideal which implies that in managed forests more intense logging could take place in order to rejuvenate the forest.

Furthermore, Environmental agency information and Estonian forest statistics show that in the last 15 years the felling volume has been smaller than the increase of growing stock¹². The forest development plan until 2030 is not final yet. There is a preliminary proposal that is going through an environmental impact assessment. It is not expected that the plan will be finalized and approved in 2022.

Based on the above it seems reasonable that the risk was assessed as low. It seems reasonable to conclude that it is not due to current ill management of Forest Management Units that there is a dip in carbon sink from Estonian forests in the period 2030 – 2050. However also please

⁸ <https://www.riigiteataja.ee/en/eli/520012015014/consolide>

⁹ [Member States' greenhouse gas \(GHG\) emission projections — European Environment Agency \(europa.eu\)](https://european-council.europa.eu/media/assets/4/4F/1/16182021/16182021_en.pdf)

¹⁰ [file:///home/chronos/u-ab659b873022523b0ba98e7e530546e6b2751fa/MyFiles/Downloads/national_forestry_accounting_plan_2019_final%20\(1\).pdf](https://www.riigiteataja.ee/en/eli/520012019001/consolide)

¹¹ [Paragraph 5.2.4 of https://unfccc.int/sites/default/files/resource/BRIV_EE_2019.pdf](https://unfccc.int/sites/default/files/resource/BRIV_EE_2019.pdf) and pages 5 and 15 of [the national forestry accounting plan 2019](https://www.riigiteataja.ee/en/eli/520012019001/consolide)

¹² [Forest management and bioenergy | Keskkonnaministeerium \(envir.ee\)](https://www.riigiteataja.ee/en/eli/520012019001/consolide)

mind that as various opinions and research exist on forest and carbon balance it cannot be expected that PbN can supply an undeniable truth in this matter.

5. FINDINGS AND CONCLUSIONS ON THE STAKEHOLDER CONSULTATION BY PBN

We noted that the stakeholder comments in February 2020 in the context of the certification of Graanul were on the same topics as the issues in the SOMO report refer to. An important question then is whether PbN had sufficiently addressed these comments. Therefore, we gave an assignment to an independent third party, INCAS, to assess the stakeholder consultation in the context of the Graanul certification. The assignment was to perform a stakeholder consultation themselves and evaluate whether PbN's stakeholder consultation was adequate both in terms of involvement of stakeholders as well as sufficient evaluation of stakeholder's input. Sufficient evaluation means that stakeholders comments are sufficiently investigated by the certification body.

5.1 Work performed by INCAS

INCAS has approached various local stakeholders to obtain their views on the specific topics raised in SOMO report (safeguarding of Woodland Key Habitats, Natura2000 areas, threatened animal species, cultural values (cross trees), watersheds and peatlands). One of the stakeholders approached was the Estonian NGO and main contributor to the stakeholders comments, Estonian Fund for Nature "ELF". Following their input INCAS has assessed if they would come to the conclusions as PbN i.e. whether the input from stakeholders has led to the same risk assessment evaluation. This also includes whether PbN has sufficiently addressed the input from stakeholders in the current recertification as well as in the past.

5.2 Conclusions INCAS

INCAS found that the certification standard for SBP ID2E/SDE+ stakeholder consultation process was followed. PbN researched the issues raised by stakeholders and responses given by Graanul. This involved undertaking desk research and interviews with experts. PbN aimed to understand if the criteria had been met. They did not make judgements on issues beyond the scope of the SBP ID2E criteria. At the same time, they did note that some of the issues were challenging to deal with within the limited timeframe of an evaluation.

5.3 Findings

5.3.1 Documentation

PbN has a good approach for reviewing the stakeholder consultation analysis based on the experience of its auditors with forestry in Estonia and other certification systems, literature review, consultation with experts. The internal process also has the possibility of site visits if necessary although none were undertaken for the audits in question. However, in the audit reports, PbN does not give any rationale for its conclusions on the stakeholder consultation. Ideally, the certification body should give a summary of the rationale for its conclusion on each issue citing sources such as literature review, auditor experience etc.. This information could then be shared with stakeholders which would lend more transparency to the process. INCAS believes that PbN has evaluated the input adequately but would recommend that SDE+ review requirements for certification bodies to detail the rationale for their conclusions in audit reports.

5.3.2 Further research

INCAS agrees with the PbN assessment that the input was adequately addressed in the risk based approach. There are also two areas where INCAS believes that further investigation is warranted. These are the issues of peatlands and carbon stocks. There is a need for better approaches to assessing the impact of renovating old drainage systems and assessing the impact of forestry management on carbon balance. While INCAS agrees with the conclusions that the issue is low risk in terms of Graanul's operations, both issues have a potential risk at national level in Estonia and should be reviewed in the context of the requirement for Dutch approved certification norms.

5.3.3 Limitations stakeholder consultation in the context of certification

Stakeholder consultation under certification systems is usually focused on the conformity of the company undergoing certification. The approach was set up to gather additional information on

the company's adherence to the requirements of the standard. The system can work quite well at site level when stakeholder can act as 'whistle blowers' to identify issues that auditors might otherwise miss. Certification stakeholder consultation were not set up to deal with 'bigger picture' issues such as the state of endangered species, or the prevalence of unsustainable forestry practices near waterbodies, at national level. With the SDE+ approach to Category 2 forestry requiring a risk based approach, the certification of a company often requires a review of national or international level issues. The science on some issues such as carbon balance can be contradictory and the issue highly politicized. This makes the evaluation of these big picture issues extremely challenging for an auditor with potentially limited capacity to invest in reviewing issues and making a judgement on how companies are treating comments from stakeholders.

5.3.4 Best practice stakeholder consultation

While the SDE+ / SBP ID2E requirements form a good basis for stakeholder consultation there are several important gaps when compared to best practice for stakeholder consultation. Best practice recommends that organizations develop relationships with key stakeholders rather than periodically requesting feedback on documentation prior to audits. This allows for ongoing exchange and understanding of issues of concern rather than a once-off, often written, exchange in the context of periodic audits. Experience has shown that this allows for more exchange on concerns between the company and stakeholders with the auditor playing a neutral role. This is even more important as certification bodies are not incentivized to go beyond requirements to undertake more in-depth stakeholder consultation. In fact, the commercial nature of certification can incentivize certification bodies to reduce time spent on stakeholder consultation. Spending additional time on stakeholder consultation could make bids for certification activities less competitive. It also means that if a certification body wins a contract, they are unlikely to increase staff costs by engaging in additional outreach and discussions with interested parties.

6. FINDINGS FROM THE ACCREDITATION BODY

The accreditation body ASI has performed a witness audit in November 2021 on the work performed by PbN on the recertification of Graanul. The objective of this witness audit was to evaluate PbN's implementation of audit procedures, the competence of the audit team and adequateness of audit methods, findings and conclusions. Further ASI had evaluated stakeholder comments or complaints received by ASI in relation to this operation, however there were none comments or complaints received by ASI.

Further ASI confirmed that they have evaluated that PbN investigated in a sufficient manner the comments made in the SOMO report. ASI confirmed that they raised no non conformities that would confirm allegations from the SOMO report.

The outcome was that PbN has performed their recertification audit according to the standards. There were two minor non conformities however not relating to any shortcomings with respect to the topics raised in SOMO.

7. OVERALL CONCLUSIONS ON WORK PERFORMED PBN AND CONSEQUENCES SUSTAINABILITY BIOMASS

The aim of this assessment was to verify if certification to the Estonian pellet mill Graanul was granted according to the approved certification norm. The SOMO report brought forward potential examples of ill sustainable forest management in Estonia. The topics that these examples touched upon were already brought forward in the context of a certification procedure in 2020. Therefore, it is relevant to assess if these topics had been properly addressed in 2020 and to assess if the comments made in the SOMO report have been properly addressed in the recertification ending February 2022.

Based on NEa's assessment of the work performed by the certification body PbN as well as the evaluation of the input of stakeholders including the Estonian NGO ELF, which was performed by an external independent third party with expertise on stakeholder consultation in the context of certification and sustainability, we conclude that PbN has performed its certification work according to the approved certification standard. As a result this biomass supplied to Dutch energy producers is considered to comply with the Dutch legal sustainability criteria and thereby considered sustainable.

However please bear in mind that certification allows for non conformities. Further the certification standard is based on a risk based approach that may lead to less assurance for some sustainability requirements as compared to certification at the level of the forest management unit.

Further please note that there are issues in Estonia relating to insufficient mapping of WKH, sacred grounds and cross trees. Also an infringement procedure with the European Commission is started with respect to insufficient assessment of the impact on activities in Natura 2000 areas in Estonia. However we noted that progress in Estonia is being made on these issues and, moreover, they were effectively managed in the context of the certification requirements applicable to Graanul.

Finally, irrespective of our conclusion that certification was performed on correct grounds, we emphasize that some issues raised in the SOMO report should be further investigated by relevant experts. The SOMO report mentions peatlands drained prior to 2008. Outstanding is the question whether former peatlands drained prior to 2008 and currently being renovated can still be considered peatlands as well as the impact of renovation of drainage systems on the carbon balance. Taking into consideration the different opinions on the underlying variables for the carbon balance on the (medium)long term of forests in Estonia this matter deserves more investigation as well. In the meantime, both certificateholders and certification bodies could consider the impact on ecological and carbon values when dealing with biomass from formerly drained peatlands, and dialogues on this topic between stakeholders, experts and certification schemes is encouraged.