

Stakeholder report

on external input provided by stakeholders
for assessment of the

certification scheme SFI FMS
and SFI CoC

(request for advice from September 2018)

against the legal Dutch sustainability criteria
for solid biomass for energy applications

by the

Advisory Commission on Sustainability
of Biomass for Energy Applications

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1 Scope of this report

1.1 Introduction

This stakeholder report focusses on the external input as provided by stakeholders and on the ADBE's response to that input. This report is part of the advice of the advisory commission sustainability biomass for energy purposes (ADBE) on the application for approval by certification scheme "Sustainable Forestry Initiative" (SFI). Another part of the advice is the public report on the assessment of SFI. In that public report a general introduction is given, as well as a description of the commission's assessment procedure.

This stakeholder report will be published on the ADBE website after the minister has taken and published a decision on the SFI request for approval.

1.2 External input for the certification scheme SFI

On September 20, 2018 the advisory commission received a request for advice on SFI from the Dutch Ministry of Economic Affairs and Climate Policy (EZK). Via its website and via a news message distributed by email the ADBE announced that external input could be submitted within four weeks (September 20 to October 18, 2018).

External input was received from the following stakeholders:

1. Jointly by Natural Resources Defense Council (NRDC), Dogwood Alliance and Partnership for Policy Integrity (PFPI); and
2. The US National Wildlife Federation (NWF).

Their input was largely the same: the input by NWF was also included in the input by NRDC plus Dogwood Alliance. In addition, NRDC plus Dogwood Alliance repeated part of their input under separate sustainability criteria.

In the tables of this report, their input will be marked with colours against a light yellow background:

1. Input by NRDC, Dogwood Alliance and PFPI
2. Input by NWF

The tables in this report include also the response of the ADBE to the external input. This will be marked red against a light-blue background:

Reaction by the advisory commission is marked by red-coloured text
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In the following chapters only those sustainability criteria and management criteria are listed for which external stakeholders have provided external input. The "toetsingsprotocol" (assessment protocol; available on the ADBE webpage "[Toetsingsprocedure](#)", in Dutch) as well as chapter 4 of the public assessment report give the full list of sustainability and management criteria.

1.3 Readers guide

The next four chapters in this report give the external input provided by NRDC, Dogwood Alliance plus PFPI and by NWF. External input towards the sustainability criteria is given in chapter 2 and chapter 3, on general and more detailed external input, respectively. External input towards the management criteria is given in chapter 4 and chapter 5, on general and more detailed external input, respectively. Chapter 6 gives the references as provided by the stakeholders. An annex lists the abbreviations that are used throughout this report.

2 General input towards sustainability criteria

The ADBE's form for submitting external input gives in section B the possibility to make more general comments on sustainability criteria. No such general comments were provided by the stakeholders.

The ADBE has made one general observation, which is referred to from the assessment under a number of the sustainability criteria in chapter 3.

General observation

The commission has noted that some of the indicators under the SFI Forest Management Standard (SFI FMS) (e.g. under Performance Measures 3.2, 4.1, 4.2 and 4.3) are broadly formulated, for instance by referring to "programs" or "plans". The commission has the opinion that just checking during an audit whether these programs and plans are present is not sufficient evidence for demonstrating that the overarching performance measure is complied with.

In order to find out how SFI auditors deal with this issue in practice, the commission has looked into SFI audit reports. Full audit reports are generally not made public by the auditors and SFI, so the commission has looked into a number of the summary audit reports that are publicly available on the [SFI website](#). By looking into 20 reports on SFI Forest Management Standard audits, the commission has developed the following view.

On the one hand the commission observed that the level of detail in the summary audit reports varies and is in some cases limited. In some of these reports the conclusions are formulated in very generic qualitative terms.

On the other hand the commission observed from these reports that observations from field trips have been taken into account and can lead to non-conformities. The commission noted – from a 2016 surveillance audit on New York State Department of Environmental Conservation where more information was published than just the summary audit report – that visual observations per indicator for each performance measure were taken into account even when the summary audit report was worded in very general qualitative terms. The commission also observed that multiple-day field assessments were as a rule part of each audit, as well as interviews with relevant staff. The commission therefore concludes that observations "on the ground" during field visits do play a role in determining whether performance measures are met, also when the indicators are limited to programs and plans. This is in line with the second part of requirement 5.4.1 from Section 9 "Audit procedures and auditor qualifications and accreditation" from the SFI 2015-2019 Standards and Rules stipulating that: *"Evidence shall be compiled by examining operating procedures, materials relating to forestry practices and on-the-ground field performance, and through meetings or correspondence with employees, contractors and other third parties (e.g.,), as appropriate, to determine conformance to the SFI 2015-2019 Forest Management Standard and the SFI 2015-2019 Fiber Sourcing Standard."*

As a result, in case of the presence of general indicators (such as "plans or programs are present") under a more concrete performance measure, (a) the commission is of opinion that the auditor shall also perform checks whether these plans and programs have been implemented and whether they have led to the intended results, and (b) the commission has no reasons to conclude that auditors have not done so when performing conformity assessments against the SFI Forest Management Standard.

3 External input towards sustainability criteria

The tables below list the external input on individual sustainability criteria and include the reaction of the ADBE to that external input.

Principle 1: The use of biomass leads to a substantial reduction in greenhouse gas emissions calculated across the entire chain in comparison with the use of fossil fuels

Sustainability criterion from Dutch legislation	External input provided by stakeholders	Commission's reaction to the external input
<p>1.1a The reduction in CO2-eq emissions is calculated to be a minimum of 70% per year on average based on the EU reference value. The average emissions have a maximum of 56 g CO2-eq/MJ for electricity and 24 g CO2-eq/MJ for heat.</p>	<p><i>Please note that it is impossible to demonstrate compliance with this part a of the sustainability requirement by using a certification scheme, as compliance can only be demonstrated afterwards (looking back at all consignments of biomass used during a year) and by looking at consignments that were possibly delivered using multiple certification schemes.</i></p> <p><i>As a result, you are not asked to give external input for criterion 1.1a.</i></p> <p><i>Please also note that approval can only be given for criterion 1.1 (the sum of 1.1a and 1.1b) and that, as a result, it is not possible to fully comply with requirement 1.1 using certification.</i></p>	
<p>1.1b No consignment of biomass shall result in emissions above 74 g CO2-eq/MJ for electricity and 32 g CO2-eq/MJ for heat. The calculated maximum CO2-eq emission levels are based on the most recent European Commission publication on sustainability criteria for biomass and on the reference values provided for fossil fuels.</p>	<p>The SFI Standard does not include any requirements for emissions associated with biomass for electricity or heat generation.</p> <p>Source 1</p> <p>SFI does not address emissions</p> <p>Source 1</p>	<p>The commission concludes that this sustainability criterion is not addressed by SFI FMS.</p>

Principle 3: Production of raw biomass does not result in the destruction of carbon sinks

Sustainability criterion from Dutch legislation	External input provided by stakeholders	Commission's reaction to the external input
<p>3.1 Biomass is not sourced from permanently drained land that was classified as peat land on 1 January 2008, unless it can be demonstrated that the</p>	<p>The SFI Standard does not include any prohibitions or limitations on sourcing biomass from permanently drained land that was classified as peat land on 1 January 2008.</p> <p>Source 1</p>	<p>The SFI program does not include a specific provisions to prevent that (forest) peatlands are drained into (drier) forest areas. Also, SFI does not mention a historical cut-off date (2008) for not using drained land that was classified as peat land on 1 January 2008. As a result, the commission concludes that this criterion is insufficiently addressed by SFI FMS.</p>

	<p>production and harvesting of the biomass does not result in water depletion of a previously undrained soil.</p>	<p>SFI does not address carbon sinks or peat land</p> <p>Source 1</p>	
<p>3.2</p>	<p>Biomass is not sourced from land that was converted from wetland to an alternative, dryer ecosystem after 1 January 2008.</p>	<p>While the SFI Standard includes general requirements around using Best Management Practices, (i.e., maintain programs and plans addressing management and protection of rivers, streams, lakes, wetlands, other water bodies and riparian areas during all phases of management), there are not specific prohibitions on sourcing from land that was converted from wetland to an alternative, dryer ecosystem after 1 January 2008.</p> <p>Source 1</p> <p>SFI calls for adoption of BMPs to protect wetlands, but does not preclude biomass from land that was from a converted wetland.</p> <p>Source 1</p>	<p>Although wetlands are protected under the SFI Forest Management Standard, SFI does not mention a historical cut-off date (2008) for not using drained land that was classified as wetland on 1 January 2008 – there is therefore a time gap for meeting this requirement between 2008 and the moment of SFI certification, and as a result the commission concludes that the criterion is insufficiently addressed by SFI FMS.</p>
<p>3.3</p>	<p>Biomass is not sourced from wood plantations that were created by means of conversion of natural forests after 31 December 1997, unless the forest manager is not directly or indirectly responsible for the conversion. Biomass originating from wood plantations that were created after 1997 by means of conversion of degraded natural forests or degraded land is exempt from this requirement on condition that it is ecologically and economically justified to do so and that the forest manager is not directly or indirectly responsible for the degradation.</p>	<p>The SFI Standard does not include an outright prohibition on sourcing from production forests, including wood plantations, which were created by means of conversion of natural or semi-natural forests after 31 December 1997. The Standard provides some limitations on conversion but does not include a date (e.g., must be in compliance with relevant national and regional policy and legislation related to land use and forest management, must not convert native forest types that are rare, high conservation value and ecologically significant at the landscape level). In carrying out conversions, participants need only consider the ecological impacts of the conversion including a review at the site and landscape scale as well as consideration for any appropriate mitigation measures.</p> <p>Source 1</p> <p>SFI has limits on conversion of forest type, but the criteria refer to averages (Sustainable Forest Management, Objective 1, Performance Measure 1.2). The standard should have specific criteria with dates on when the forest was converted and limits on size of individual stand-level harvests.</p> <p>Source 1</p>	<p>SFI FMS does not provide a historic cut-off date for not allowing conversion of one forest cover type to another forest cover type and does not include the exception conditions from the Dutch criterion for allowing this conversion. This means that the requirement in SFI Forest Management Standard, Performance Measure 1.2 applies only to the current SFI-certified land. There is therefore a gap in the requirement of exempting biomass originating certification from wood plantations that were created after 1997 by means of conversion of natural forests.</p> <p>As a result the commission concludes that the SFI Forest Management Standard insufficiently addresses Dutch sustainability criterion 3.3.</p>

Principle 4: The use of biomass does not result in a long-term carbon debt

<u>Sustainability criterion from Dutch legislation</u>	<u>External input provided by stakeholders</u>	<u>Commission’s reaction to the external input</u>
<p>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.</p>	<p>The SFI Standard does not include any requirements for emissions associated with biomass for electricity or heat generation.</p> <p>Source 1</p> <p>SFI does not address this</p> <p>Source 1</p>	<p>The commission does not understand the input by NRDC, Dogwood Alliance and PFPI as Dutch criterion 4.2 is on carbon stocks in the FMU, not about emissions when generating heat or electricity.</p> <p>SFI FMS Performance Measure 1.1 stipulates that Program Participants shall ensure that forest management plans include long-term harvest levels that are sustainable and consistent with appropriate growth-and-yield models. One of the indicators requires that documented current harvest trends fall within long-term sustainable levels identified in the forest management plan.</p> <p>SFI FMS does require various forest management measures (e.g. reforestation after harvest) with the aim to maintain long-term harvest levels, which indirectly retains carbon storage on the long term. SFI FMS does not mention an increase in carbon stocks on the long term, which is however not required as the Dutch requirement stipulates “or”. As (a) SFI FMS does only indirectly address carbon stocks in Performance Measures and Indicators and as it does not address the “increased” part of the Dutch criterion, the commission concludes that Dutch criterion 4.1 is largely addressed by SFI FMS.</p>
<p>4.2 Biomass is not sourced from stumps unless these stumps had to be removed from the site for other reasons than wood or biomass production.</p>	<p>The SFI Standard does not include any limitations on sourcing biomass from stumps.</p> <p>Source 1</p> <p>SFI does not address this</p> <p>Source 1</p>	<p>Although SFI requires to implement forest management practices to protect and maintain forest and soil productivity (Performance Measure 2.3) and recognizes the importance of stumps as wildlife habitat element for biodiversity (Performance Measure 4.1), the SFI Forest Management Standard does not explicitly exempt biomass that is sourced from stumps (unless these stumps had to be removed from the site for other reasons than wood or biomass production).</p> <p>The commission is aware that currently in the USA harvesting stumps is not economically feasible. The ADBE notes that experiences in other countries show that there can be a market for stumps. As market conditions can change (for instance through an increased demand of biomass in the energy market) and as there is no mechanism to correct the approval of certification schemes once markets change (the approval is permanent instead of temporary), this criterion can to the opinion of the ADBE only be covered if the certification scheme includes a clear requirement. Therefore the commission concludes that Dutch criterion 4.1 is insufficiently addressed by the SFI Forest Management Standard.</p>
<p>4.3 On average less than half the volume of the annual round wood harvest from forests is processed as</p>	<p>The SFI Standard does not include any limitations on the volume of annual round wood harvested from forests for biomass energy generation.</p> <p>Source 1</p>	<p>SFI does not specially address (requirements on) the annual volumes of round wood harvest from forests that can be processed as biomass for energy generation, or a verification of this. Dutch sustainability criterion 4.3 is therefore not addressed by the SFI Forest Management Standard.</p>

	biomass for energy generation.	SFI does not address this Source 1	
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Principle 5: Biomass production does not result in Indirect Land Use Change (ILUC)

<u>Sustainability criterion from Dutch legislation</u>	<u>External input provided by stakeholders</u>	<u>Commission's reaction to the external input</u>
5.1	<p>Biomass sourced from bioenergy plantation systems that were planted after 1 January 2008 has a demonstrably low ILUC risk.</p> <p>The SFI Standard does not include any requirements for demonstrating low ILUC risk. Source 1</p> <p>SFI does not have a date for which plantations must be established to be eligible for harvest. SFI does allow conversion of forest types, causing land use change. There is guidance on land conversion, but there is no evidence that it achieves demonstrably low ILUC risk. Source 1</p>	<p>Management operations that are classified as short rotation woody crops are not within the scope of the SFI 2015-2019 Standards and Rules and are excluded for SFI certification.</p> <p>The Dutch definition on bioenergy plantation systems is: "een teeltsysteem dat specifiek gericht is op de productie van biomassa voor energiedoeleinden, waarbij zeer snel groeiende boomsoorten in hoge dichtheid zijn aangeplant en na een korte rotatieperiode worden geoogst". The Dutch definition includes forest plantations with rotation times of 2 - 20 years. SFI FMS does not give definitions for short rotation woody crops and forest plantations. In answer to questions by the commission, the SFI scheme manager has responded that "short rotation (i.e. fast growing) woody or agro-forestry crops are typically crops with rotation ages resulting in materials that cannot be used in traditional forest product sector. A poplar stand that is grown to a rotation age of 20 years would not be a short rotation woody crop."</p> <p>As a result, a forest stand with rapid growing tree species as poplar is for example considered a bioenergy plantation under the Dutch definition, while this might be considered a plantation forest (and not a short rotation woody crop) under the SFI definitions. This means that SFI certified forests can contain bioenergy plantation systems conform the Dutch definition.</p> <p>For the commission, it is clear that forest plantations shall also comply with criterion 5.1, as the criterion applies to biomass category 1.</p> <p>As SFI FMS does not include a requirement to demonstrate a low ILUC risk, the commission concludes that SFI FMS does not address Dutch sustainability criterion 5.1</p>

Principle 7: Biodiversity is maintained and where possible enhanced

<u>Sustainability criterion from Dutch legislation</u>	<u>External input provided by stakeholders</u>	<u>Commission's reaction to the external input</u>
7.1	<p>Sites with a high conservation value and representative areas of the forest types that are found in the forest management</p> <p>The SFI Standard only requires that programs be in place to identify and protect forests of exceptional value, however, there are no specific performance-based requirements for the substance of those programs. When it comes to protecting old growth forest types, for example, the closest the revised standard comes to requiring the protection in the US</p>	<p>The commission observed that the indicators under some of the SFI Performance Measures (such as 4.1, 4.2 and 4.3) are rather broad, and that meeting these indicators does not automatically demonstrate compliance to the overarching Performance Measure. SFI requires in section 9 (5.4.1) that evidence shall include, amongst others, "on-the-</p>

	<p>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 landscape level and cultural values.</p>	<p>and other countries where it is now rare is an indicator requiring “support of and participation in plans or programs for the conservation of old-growth forests in the region of ownership or forest tenure.” It is very unlikely that plans and programs exist in most regions in the US requiring the protection of all remaining old growth, and even if such plans were to exist, almost any action could count as “support and participation.” Most importantly, the standard does not require protection of old growth in the forests actually being certified. (See Indicator 3 under Performance Measure 4.2.)</p> <p>Sources 1, 2 and (pg. 7-8 of) 3</p> <p>Standard only applies to known sites of imperiled species (Objective 4, Performance Measure 4.2).</p> <p>Source 1</p>	<p><i>ground field performance, and through meetings or correspondence with employees, contractors and other third parties</i>”. The commission has looked into SFI summary audit reports to assess whether SFI auditors use the above mentioned evidence to check the actual implementation and effects of programs and plans. The commission has no reasons to conclude that auditors are not doing so when performing conformity assessments against the SFI Forest Management Standard, see also the general observation in chapter 2.</p> <p>The commission concludes that identification and protection of sites with high conservation values and representative areas of the forest types is covered by SFI FMS, based on Performance Measures 4.2, 4.3, 4.4 and 6.1. Enhancement is not covered in the SFI FMS standard and – as also the indicators are broad - the commission concludes that SFI FMS largely addresses Dutch sustainability criterion 7.1.</p>
7.2	<p>Measures have been taken to protect endangered plant and animal species and, if applicable, to increase the populations and enhance the habitats of these species.</p>	<p>The SFI Forest Management Standard does not sufficiently protect threatened and endangered species or habitat. As pointed out by the Forest Ethics analysis, and is true with many aspects of the standard, “the standard’s sole indicator that directly speaks to protection of officially recognized threatened and endangered species merely requires landowners to have a “program to protect threatened and endangered species.” No specific outcomes or protection levels are required of these programs, and the indicator’s wording is such that auditors will be asking the question of whether certified companies have a program, and not what the program is designed to achieve, or how well it is being implemented. (See Indicator 1 under Performance Measure 4.2.) Thus it is not surprising that SFI auditors have certified forests in which large amounts and even the entirety of threatened and endangered terrestrial species’ habitats and populations in the forest are being eliminated pursuant to exemptions from the federal Endangered Species Act known as “Incidental Take Permits.” Likewise, SFI has certified forests in states where existing BMPs are well-documented as being insufficient for the protection of threatened salmon and other anadromous fish, e.g., Oregon. A new Indicator 5 for Performance Measure 4.1 now calls for “program[s] to address conservation of known sites with viable occurrences of significant species of concern.” While “species of concern” is not defined in the standard, the Guidance for Indicator 5 does reference some relevant data sources (e.g., the NatureServe “S” and IUCN “red” lists). However, here too no specific outcomes or species protections are required, and auditors will likely just consider whether certified companies have a “program.” Moreover, the Guidance for Indicator 5 also exempts timber companies from surveying their forests for “species of concern” and instead allows them to simply consult databases that are known to have few entries for private timberlands. The standard’s requirements for the identification and protection of imperiled species that are not yet officially recognized as threatened or endangered also remain seriously deficient. As before, the standard does require a “program to locate and protect</p>	<p>The commission observed that the indicators under some of the SFI Performance Measures (such as 4.1, 4.2 and 4.3) are rather broad, and that meeting these indicators does not automatically demonstrate compliance to the overarching Performance Measure. SFI requires in section 9 (5.4.1) that evidence shall include, amongst others, “on-the-ground field performance, and through meetings or correspondence with employees, contractors and other third parties”. The commission has looked into SFI summary audit reports to assess whether SFI auditors use the above mentioned evidence to check the actual implementation and effects of programs and plans. The commission has no reasons to conclude that auditors are not doing so when performing conformity assessments against the SFI Forest Management Standard, see also the general observation in chapter 2.</p> <p>Performance Measure 4.2 stipulates that Program Participants shall protect threatened and endangered species, Forests with Exceptional Conservation Values (FECV) and old-growth forests. Indicators include a program to protect threatened and endangered species and a Program to locate and protect known sites of flora and fauna associated with viable occurrences of critically imperiled and imperiled species and communities also known as Forests with Exceptional Conservation Value.</p> <p>“Threatened and endangered” is defined by SFI as: Listed under The US Endangered Species Act (ESA) or The Canadian Species at Risk Act (CSARA) and listed under applicable state or provincial laws requiring protection. These lists - which include federal list such as published by the US Fish and Wildlife Service (FWS) - are distinct from the IUCN International Red lists.</p> <p>Although some species may be under-recognized on Federal level (see the scientific letter in source [8]), analysis shows that the combined ESA/FWS lists also contain many species that are not included on the (global) IUCN red lists. The Dutch legislation contains a definition for endangered plant</p>

known sites associated with viable occurrences of critically imperiled and imperiled species and communities." (See Indicator 2 under Performance Measure 4.2.) However, no specific outcomes or protection levels are required of these programs, and the wording of the indicator is such that auditors will be asking the question of whether certified companies have a program, and not what the program is designed to achieve, or how well it is being implemented. The standard's definitions of "critically imperiled" and "imperiled" species are also very limited, and do not even cover many species that are officially recognized as threatened and endangered, much less ones that are not officially recognized. Prominent examples of species not included in these definitions include: grizzly bear, Louisiana black bear, gray wolf, Canada lynx, woodland caribou, Carolina Northern flying squirrel, peregrine falcon, Northern spotted owl, red cockaded woodpecker, Lahontan cutthroat trout, Coho salmon, sockeye salmon, and bull trout. Similarly, protection is only afforded to "known occurrences" and the relevant databases tend to lack information on threatened and endangered species' occurrences on timber company lands. Likewise, protection is limited to "viable" occurrences, which is questionable in the context of species whose existence is by definition tenuous. As before, the standard also lacks any express requirement or even encouragement for companies to help restore habitats for threatened and endangered wildlife, to enable their recovery."

Sources 1, 2 and (pg. 8 of) 3

SFI has guidance on protecting Forests with "Exceptional Conservation Value" and threatened and endangered species. However, it lacks specific performance-based requirements that would protect and increase populations and habitats.

Source 1

and animal species which reads (translated) "plant and animal species that at a minimum are classified as threatened on the global IUCN red list and on the IUCN guidelines for the regional application of the IUCN red list". ESA/FWS lists do not strictly follow the IUCN Classification and Criteria and the IUCN regional application guidelines.

The commission looked in detail at two letters/papers (sources [8 and 9]), keeping in mind the definition in Dutch legislation for endangered plant and animal species. The commission has observed that – since scientific letter [8] was published in 2011 – some of the bird species changed global status within IUCN (for instance from "Endangered" to "Near threatened") and that some other species which early 2011 were included in the IUCN red list and were not included in the ESA list are included in the most recent ESA list. Nevertheless the commission has also observed some species that were included in the IUCN red list and were not included in the ESA list in 2011 and still are not included in the ESA list today.

It might be that species that are not included in the ESA list are included in other relevant lists at US State level. However, the commission is of opinion that it would be very time-consuming – if not impossible as the lists change over time – to check that species listed as 'threatened' (including the categories Vulnerable, Endangered and Critically Endangered) on the global IUCN red list are covered either by the federal ESA list or by lists in the States where these species occur. Please note that such an exercise should be performed not only for birds but also for IUCN listed plants, insects, crustaceans, gastropods, amphibians and mammals.

In paper [9] it is argued that – due to differences in for instance intended purpose and of scale of the analysis – it is logical that the ESA and CSARA lists differ from the IUCN lists, and that "on balance it is likely that assessments done at a finer spatial scale with local data (e.g., the US ESA) that are likely more accurate, and better reflect the actual state of extinction risk for those species."

The commission is bound to the strict definitions in Dutch legislation. According to the Dutch legislation and the definition for endangered plant and animal species, the IUCN lists and regional application guidelines must be used to comply with Dutch sustainability criterion 7.2. As there are differences between the IUCN list and the ESA/CSARA plus federal lists, the commission cannot conclude that Dutch criterion 7.2 is addressed through the US Endangered Species Act and the Canadian Species at Risk Act plus federal/local lists.

The commission further observes that SFI FMS does not specifically require taking measures (if applicable) to increase the populations and enhance the habitats of endangered plant and animal species.

The commission concludes that Dutch sustainability criterion 7.2 is insufficiently addressed by SFI FMS.

<p>7.3</p>	<p>The conversion of forests within the forest management unit to other forms of land use, including wood plantations, is not permitted unless:</p> <ul style="list-style-type: none"> - the area concerned is small which means the total converted area over the years is no greater than 5% of the area of the forest management unit on benchmark date 1 January 2008; and - it clearly leads to long-term advantages for nature conservation; and - there is no damage or threat of damage to sites with a high conservation value. 	<p>The SFI Standard does not include any area limitations on converting forests to wood plantations nor does it include any benchmark dates. The Standard also does not require that such conversion lead to long-term advantages for nature conservation. The Standard provides some limitations on conversion (e.g., must be in compliance with relevant national and regional policy and legislation related to land use and forest management, must not convert native forest types that are rare, high conservation value and ecologically significant at the landscape level). However, these limitations are largely meaningless, as such conversions are rarely illegal, and forest types that are rare at the landscape level is a rare situation. Furthermore, conversion which would make native forest types rare is a very high threshold to meet, and long-term impacts to "forests of exceptional conservation value," old growth, or threatened or endangered species' habitats are also rare by definition and poorly documented. (See the Indicators for Performance Measure 1.2.)</p> <p>Source 1</p> <p>SFI does allow conversion of forest types. There is guidance on land conversion, but it is addressed as an average across harvests--an individual harvest is not regulated.</p> <p>Source 1</p>	<p>SFI FMS Performance Measure 1.2 stipulates that Program Participants shall not convert one forest cover type to another forest cover type, unless in justified circumstances.</p> <p>This Dutch criterion mentions that conversion of forests within the forest management unit to other forms of land use, including wood plantations, is not permitted unless 3 exceptions are met:</p> <ol style="list-style-type: none"> 1. <u>5% limit:</u> SFI does not mention a benchmark date of January 2008, which means that historic conversions (from previous non-certified landowners) are not included. This part of the criterion is not covered by SFI FMS. 2. <u>Long-term advantages for nature conservation:</u> The SFI FMS ('avoid long-term impacts') has weaker language than the Dutch requirement ('the need for long-term advantages'). This part of the criterion is insufficiently covered. 3. <u>No damage or threat to HCV sites:</u> As Indicator, there is an exempt when conversion does (i) not create significant long-term adverse impacts on Forests with Exceptional Conservation Value, old-growth forests, forests critical to threatened and endangered species, and special sites and (ii) would not convert native forest types that are rare and ecologically significant at the landscape level or put any native forest types at risk of becoming rare. The term "does not create significant long-term adverse impact" is considerably weaker compared to Dutch requirement "there is no damage or threat of damage". This part is not sufficiently covered. <p>The commission concludes that – as none of the three exceptions are met by SFI, Dutch sustainability criterion 7.3 is insufficiently addressed by the SFI Forest Management Standard.</p>
<p>7.4</p>	<p>In the case of wood plantations, there is a preference for native species, and a relevant percentage of the plantation must be able to revert to natural forest at a later stage.</p>	<p>The SFI Standard does not include a preference for native species in wood plantations, nor does it include any requirements for a relevant percentage of the plantation to revert to natural forests at a later stage. Where a Program Participant intends to convert to another forest cover type, an assessment only considers:</p> <ol style="list-style-type: none"> a. Productivity and stand quality conditions and impacts which may include social and economic values; b. Specific ecosystem issues related to the site such as invasive species, insect or disease issues, riparian protection needs and others as appropriate to the site including regeneration challenges; and c. Ecological impacts of the conversion including a review at the site and landscape scale as well as consideration for any appropriate mitigation measures. <p>Source 1</p>	<p>The Dutch criterion 7.4 consists of two parts:</p> <ol style="list-style-type: none"> 1. <u>Preference for native species:</u> SFI FMS requires (Performance Measure 2.1) prompt reforestation without specifically mentioning the preference for native species. SFI FMS requires that "plantings of exotic tree species should minimize risk to native ecosystems" which is not the same as a preference for using native species. Therefore this part of the criterion is insufficiently covered by SFI. 2. <u>A relevant percentage of the plantation must be able to revert to natural forest:</u> Although the SFI standard does require the conservation of native biological diversity (indicator 1 under Performance Measure 4.1), the SFI Standard does not require that a relevant percentage of the plantation must be able to revert to natural forest at a later stage. This part of the criterion is not covered by SFI. <p>As a result, the commission concludes that Dutch criterion 7.4 is insufficiently addressed by SFI FMS.</p>

		<p>SFI does have provisions on invasives, but does not indicate a preference for native species with plantations. Instead, it provides that exotic species not threaten native populations (FMS, Objective 2, PM 2.1)</p> <p>Source 1</p>	
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Principle 8: The regulating effect and the quality, health and vitality of the forest are maintained and where possible enhanced

<u>Sustainability criterion from Dutch legislation</u>	<u>External input provided by stakeholders</u>	<u>Commission's reaction to the external input</u>
<p>8.1 The soil quality of the forest management unit is maintained and if necessary improved, with special attention to coasts, river banks, erosion-sensitive areas and sloping landscapes.</p>	<p>While the SFI standard includes very general requirements around maintaining soil quality and protecting sensitive soils (i.e., Program Participants shall implement forest management practices to protect and maintain soil productivity), these requirements are process-based and lack performance-based indicators. In practice there have been egregious instances where SFI certified companies violated these general requirements and no corrective action or suspension of certification occurred. The "On the Ground" report cites several examples. One example, an SFI certified US company operating in Washington and Oregon is particularly troubling (Weyerhaeuser). In this case study it is noted that in October 2009 an SFI nonconformance complaint was filed against Weyerhaeuser for clearcutting and roadbuilding on extremely steep and unstable slopes in the Upper Chehalis and Stillman districts of southwest Washington. Weyerhaeuser were clearcutting forests and building roads on slopes that were known to have a history of landslides, high slope instability and soil erosion. In December 2007 a big storm resulted in flooding that caused more than \$57 million of property damage in the area. Weyerhaeuser's clearcut practices and failure to promptly replant on high risk slopes, led to a greater number of landslides and substantial sediment accumulation a long way downstream. Apparently, neither of these problems were raised by SFI auditors in their public summaries between 2005 and 2010. In fact, apparently the 2005 surveillance audit conducted by the auditor had praised Weyerhaeuser for its "excellent protection of... unstable slopes... in all areas."</p> <p>Sources 1, 4 (Page 28) and 5</p>	<p>The commission has looked into:</p> <ul style="list-style-type: none"> • the 'On-the-ground' study; • a memorandum (as provided via NRDC) by the Washington Forest Law Center (173 pages) describing their experiences with the SFI "Non-conformance complaint" procedure • further input provided by the SFI scheme manager. <p>The commission observes that the complaint as mentioned in the NDRC input was filed against the certification body of the SFI certified company Weyerhaeuser. Although the intention of the complainant was to request SFI to take action against Weyerhaeuser (for conducting forest practices that resulted in direct environmental harm and, in the opinion of the complainant, violating the letter and spirit of the SFI indicators), SFI's complaint and appeal procedures did not allow to do so. The complaint had to be directed to the certification body and an appeal would only be possible against the organization that accredited the certification body.</p> <p>As the advisory commission has no mandate to advise on the quality of audits being performed, the commission will not look into whether the auditor did or did not correctly conclude the company to confirm with (amongst others) SFI Performance Measures 2.3, 6.1, 3.1, 8.3, 2.1, 3.2, and 11.1 and with SFI Principle 2.</p> <p>This "Non-conformance complaint" has also been dealt with by TPAC, a Dutch commission on sustainable procurement criteria for timber. TPAC published their findings in a public report. The commission endorses the last recommendation of the TPAC report which reads:</p> <p style="padding-left: 20px;">The magnitude of the damage of the landslides to society and ecology demands from all actors - forest managers, state officials and SFI officials - to evaluate their underlying processes, and to inventory what improvements are within its capacity to prevent repetition. SFI should consider making clear to the public what evaluation it has performed and what its conclusions were regarding improvements to avoid future landslides.</p> <p>The commission has assessed whether SFI FMS complies with Dutch sustainability criteria 8.1, the results of this assessment read as follows:</p>

			<p>The commission observed that the indicators under some of the SFI Performance Measures (such as 4.1, 4.2 and 4.3) are rather broad, and that meeting these indicators does not automatically demonstrate compliance to the overarching Performance Measure. SFI requires in section 9 (5.4.1) that evidence shall include, amongst others, <i>“on-the-ground field performance, and through meetings or correspondence with employees, contractors and other third parties”</i>. The commission has looked into SFI summary audit reports to assess whether SFI auditors use the above mentioned evidence to check the actual implementation and effects of programs and plans. The commission has no reasons to conclude that auditors are not doing so when performing conformity assessments against the SFI Forest Management Standard, see also the general observation in chapter 2.</p> <p>Dutch criterion 8.1 contains two parts:</p> <ol style="list-style-type: none"> 1. <u>The soil quality of the FMU is maintained and if necessary improved ...</u> Performance Measure 2.3 stipulates that Program Participants shall implement forest management practices to protect and maintain forest and soil productivity. As there is no mentioning about improvement under the SFI standard (if necessary), the commission concludes that this part of the criterion is largely covered by the SFI Forest Management Standard. 2. <u>... with special attention to coasts, river banks, erosion-sensitive areas and sloping landscapes</u> SFI pays specific attention to erosion-sensitive and sloping landscapes: One of the indicators of Performance Measure 2.3 stipulate that there should be (i) a process to identify soils vulnerable to compaction, and use of appropriate methods... and (ii) use of erosion control measures to minimize the loss of soil and site productivity. Performance Measure 3.2 stipulates that Program Participants shall implement water, wetland and riparian protection measures based on a.o. soil type and terrain factors. Therefore, this part of the criterion is covered. <p>As the first part of the criterion is largely covered and the second part is covered, the commission concludes that Dutch criterion 8.1 is largely addressed by the SFI Forest Management Standard.</p>
8.2	<p>The water balance and quality of both groundwater and surface water in the forest management unit and downstream outside the forest management unit are at least maintained and where necessary improved.</p>	<p>According to the Forest Ethics' analysis (SFI: New and Unimproved), requirements for the protection and restoration of water quality and aquatic and riparian habitats are seriously deficient. "The Forest Management Standard still fails to require that all stream reaches, water bodies, and wetlands be consistently identified and mapped. Rather, the standard only requires such identification where it is required by "best management practices" (BMPs) – which may not always require identification of all stream segments and water bodies. (See the Indicators for Performance Measure 3.2.) The Forest Management Standard still provides no objective management prescriptions, thresholds, or other performance measures to protect and restore water</p>	<p>The commission observed that the indicators under some of the SFI Performance Measures (such as 4.1, 4.2 and 4.3) are rather broad, and that meeting these indicators does not automatically demonstrate compliance to the overarching Performance Measure. SFI requires in section 9 (5.4.1) that evidence shall include, amongst others, <i>“on-the-ground field performance, and through meetings or correspondence with employees, contractors and other third parties”</i>. The commission has looked into SFI summary audit reports to assess whether SFI auditors use the above mentioned evidence to check the actual implementation and effects of programs and plans. The commission has no reasons to conclude that auditors are not doing so when performing conformity</p>

		<p>quality, aquatic habitats, and other watershed values in states or provinces with weak or ineffective BMPs. (See Performance Measures 3.1 and 3.2.) There are no default stream buffer widths; prohibitions on road building and logging on steep or unstable slopes; restrictions on logging or roads when surface runoff is likely to enter streams; restrictions on logging; or other management, where it would increase stream temperatures or deliver sediments to waters that are on the EPA's list impaired waters under Clean Water Act section 303(d), etc. The Forest Management Standard's requirements for BMP compliance are also not sufficiently performance oriented. While Performance Measure 3.1 clearly calls for compliance with BMPs, the indicators that operationalize this Performance Measure merely require a "program to implement" BMPs, contract provisions calling for BMP compliance, and monitoring of BMP implementation. There are no indicators requiring any particular level of BMP compliance in-the-forest, which leaves auditors in the position of merely confirming whether companies have a program, and whether companies are monitoring their program's results – but not evaluating whether BMPs are actually properly implemented per se.</p> <p>Sources 2, 3 (Pg. 7) and 5</p>	<p>assessments against the SFI Forest Management Standard, see also the general observation in chapter 2.</p> <p>SFI FMS Performance Measure 3.1 stipulates that Program Participants shall meet or exceed all applicable federal, provincial, state and local water quality laws, and meet or exceed best management practices..[...].. Also, according to Performance Measure 3.2, Program Participants shall implement water, wetland and riparian protection measures based on soil type, terrain, vegetation, ecological function, harvesting system, state best management practices (BMPs), provincial guidelines and other applicable factors.</p> <p>SFI FMS Performance Measure 2.2 stipulates that Program Participants shall minimize chemical use with as Indicators (1) designation of streamside and other needed buffer strips and (2) monitoring of water quality or safeguards to ensure proper equipment use and protection of streams, lakes and other water bodies.</p> <p>Downstream impacts are sufficiently covered through a combination of SFI requirements and existing legislation (US federal Clean Water Act and Canadian federal Clean Water Act).</p> <p>As a result, the commission concludes that SFI FMS addresses Dutch criterion 8.2. As the indicators are broadly formulated, the commission concludes that Dutch criterion 8.2 is largely addressed by SFI FMS.</p>
8.4	<p>Unnecessary damage to ecosystems is prevented by applying reduced impact logging and the most suitable road construction methods and techniques for local conditions.</p>	<p>As noted in 8.1 and 8.2 above, there are documented cases of SFI certified companies carrying out logging that causes unnecessary damage to ecosystems. Clearly the standard's process-based standards and reliance on BMPs have been insufficient to insuring such practices do not occur.</p> <p>Sources 2, 3, (Pg. 7), 4 (Page 28) and 5</p>	<p>The Dutch criterion consists of two parts:</p> <ol style="list-style-type: none"> 1. <u>Reduced impact logging:</u> The Dutch definition on Reduced Impact Logging is "harvesting techniques and methods that have been developed to prevent unnecessary damage to the forest, the environment and the harvested wood while at the same time promoting safe working conditions". SFI Program Participants shall implement forest management practices to protect and maintain forest and soil productivity (Performance Measure 2.3). The indicators under this Performance Measure cover aspects of Reduced Impact Logging, with focus on site productivity. There are no indicators which focus on preventing damage to the environment (water streams, riparian zones, flora and fauna). As a result the commission concludes that SFI FMS largely covers the first part of the criterion. 2. <u>Road construction:</u> SFI FMS Program Participants shall also implement water, wetland and riparian protection measures based on e.g. harvesting system, state best management practices (BMPs), provincial guidelines and other applicable factors (Performance Measure 3.2). This includes as Indicator a program addressing management and protection of rivers, streams, lakes, wetlands, other water bodies and riparian areas during all phases of management, including the layout and construction of roads and skid trails to maintain water reach, flow and

			<p>quality. Also, Program Participants shall implement forest management practices to protect and maintain forest and soil productivity (Performance Measure 2.3) through, as Indicator: Road construction and skidding layout to minimize impacts to soil productivity. As a result, SFI FMS covers the second part of the criterion.</p> <p>As the first part of the criterion is largely covered and the second part is covered, the commission concludes that the Dutch criterion 8.4 is largely addressed by SFI FMS.</p>
8.7	<p>The use of chemicals is only permitted if ecological processes and the optimal deployment of sustainable alternatives prove insufficient. Pesticides classified as Type 1A and 1B by the World Health Organisation and chlorinated hydrocarbons are not permitted</p>	<p>The SFI Standard only prohibits the use of Type 1A and 1B pesticides where no other viable alternative is available.</p> <p>Source 1</p>	<p>The Dutch criterion consists of 2 parts:</p> <ol style="list-style-type: none"> 1. <u>The use of chemicals is only permitted if ecological processes and the optimal deployment of sustainable alternatives prove insufficient</u> SFI FMS Program Participants shall minimize chemical use required to achieve management objectives while protecting employees, neighbours, the public and the environment, including wildlife and aquatic habitats (Performance Measure 2.2), with as Indicators (i) minimized chemical use required to achieve management objectives and (ii) use of least-toxic and narrowest-spectrum pesticides necessary to achieve management objectives. SFI stipulates minimized use of chemical pesticides, which is not the same as only permitting chemicals if ecological processes and the optimal deployment of sustainable alternatives prove insufficient. As a result, the commission concludes that SFI FSM insufficiently covers this part of the criterion. 2. <u>Pesticides classified as Type 1A and 1B</u> As Indicator of Performance Measure 2.2, it is stipulated that the World Health Organization (WHO) type 1A and 1B pesticides shall be prohibited, except where no other viable alternative is available. This possibility for exception is not included in the Dutch criterion. The commission also observes that the estimate whether other viable alternatives are available are left to the certificate holder and the certification body, without any further guidance from the SFI certification scheme. Therefore, the commission concludes that this part is insufficiently covered by SFI. Next to that, Program Participants shall comply with applicable federal, provincial, state and local forestry and related social and environmental laws and regulations which includes Laws that prohibit the use of dangerous pesticides. The commission has already concluded that US legislation (EPA's Office of Pesticide Programs' Pesticide Chemical Registry under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) leads to conformity with the second part of this criterion for the USA. In Canada, WHO 1A and 1B are not illegal for use as long as they are used in accordance with label instructions for the chemical in use. A check on the product database from Canada (website http://pr-rp.hc-sc.gc.ca/lr-re/index-eng.php) learns that products are registered which are included in the lists of WHO type 1A an WHO type 1B

			<p>pesticides. Examples are Brodifacoum, Bromadiolone, Bromethalin, Chlorophacinone, Difethialon and Diphacinone (Type 1A) and Acrolein, Coumaphos, Cyfluthrin, Cypermethrin and Dichlorvos (Type IB). Based on the information received, it cannot be demonstrated that the Canadian law effectively prohibits the use of Pesticides classified as Type 1A and 1B by the World Health Organisation and chlorinated hydrocarbons.</p> <p>Therefore, this part of the criterion is insufficiently addressed.</p> <p>As a result, the commission concludes that Dutch sustainability criterion 8.7 is insufficiently addressed by SFI FMS.</p>
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Principle 12: A chain of custody system is in place for the biomass, that covers the entire chain from the first actor to the energy producer, that links the source to the material used in the product or product group, and provides greenhouse gas emission data of each individual link.

<u>Sustainability criterion from Dutch legislation</u>	<u>External input provided by stakeholders</u>	<u>Commission’s reaction to the external input</u>
12.2 Each link in the chain of custody has the relevant greenhouse gas emissions information for its own organisation, which has been obtained using a methodology that is based on the most recent European Commission publication on sustainability criteria for solid biomass and the reference values provided for fossil fuels.	The SFI Chain-of-Custody and Fiber Sourcing standards do not require that the relevant greenhouse gas emissions information be collected or documented.	The SFI Chain of Custody Standard does not address GHG emissions. Dutch sustainability criterion 12.2 is not addressed by SFI CoC.

4 General input towards management criteria

The ADBE’s form for submitting external input gives in section C the possibility to make more general comments on management criteria. No such general comments were provided by the stakeholders.

5 External input towards management criteria

The table below lists the external input on management criteria as provided by stakeholders, and the reaction of the ADBE to that external input.

Management criterion from Dutch legislation	External input provided by stakeholders	Commission’s reaction to the external input
<p>7. The scheme manager has enforced effective procedures for handling complaints and appeal. Appeal is treated by persons that are not directly involved in the development and the management of the document.</p>	<p>Despite the procedures for handling complaints - as described in the new SFI Transparency Policy - a third party cannot hold an SFI-certified landowner to SFI’s forest protection standards as SFI’s forest management standards are weak, ambiguous, and vague. The bottom line is that SFI’s forest management standards are not, as a practical matter, enforceable by any third party.</p> <p>Sources 5 and 6</p>	<p>The SFI Transparency policy (updated in June 2018) mentions that “SFI has a process for handling complaints related to governance (SFI Inc. Board of Directors) and executive functions (SFI Inc. President and CEO). Complaints will be brought to the full SFI Board and a response will be provided following the next scheduled quarterly Board meeting. If the response is not to the satisfaction of the complainant, the complainant can appeal the decision and it will be brought to the SFI External Review Panel, an independent body of experts that provides advice to the SFI Board.</p> <p>The first part of the Dutch management criterion M7 reads “The scheme manager has enforced effective procedures for handling complaints and appeal”. The understanding of the commission is that these include procedures for handling complaints and appeal against activities and decisions by SFI itself. In addition, for the activities and decisions by certification bodies (CBs) separate complaint and appeal mechanisms apply. From section 11 of the SFI 2015-2019 standards, the commission concludes that (1) complaints can be filed against a company (a program participant), a certification body, against SFI regarding on-product label use and against the External Review Panel regarding disposition of comments, and (2) that appeal can be filed against a certification body’s certification decision.</p> <p>Procedures for handling complaints and appeal on activities and decisions by SFI itself are laid down in the SFI transparency policy from June 2018. This Policy mentions that complaints related to governance can be brought to the full SFI Board. If the response is not to the satisfaction of the complainant, the complainant can appeal the decision and it will be brought to the SFI External Review Panel, which is an independent body of experts.</p>

			<p>Thus, procedures for handling complaints and appeal on activities and decisions by SFI itself, treated by an independent body of experts, are in place which leads to the conclusion that SFI addresses this criterion. However, these procedures (e.g. timeframe, rules on composition of expert groups) are explained only very briefly and are given in a separate document as compared to (Section 11 in) document "SFI 2015-2019 Standards and Rules". Therefore, the commission concludes that Dutch management criterion 7 is largely addressed by SFI.</p>
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6 Documents used for considering the external input

The following documents have been used when considering the external input. Documents 1 – 7 were provided by the stakeholders that provided external input.

1. SFI 2015-2019 STANDARDS AND RULES.
<http://www.sfiprogram.org/files/pdf/2015-2019-standardsandrules-web-lr-pdf/>
2. Forest Ethics. "SFI: New and Unimproved. Analysis of Revised Sustainable Forestry Initiative Standards," 2015.
<https://www.nrdc.org/sites/default/files/sfi-report-new-and-unimproved.pdf>.
3. Forest Ethics. "SFI: New and Unimproved. Analysis of Revised Sustainable Forestry Initiative Standards," 2015. Detailed analysis.
4. "On the Ground" 2011.
http://www.wwf.de/fileadmin/user_upload/PDF/On_The_Ground_2011.pdf.
5. Washington Forest Law Center. Memorandum to Debbie Hammel. April 3, 2018.
6. SFI Transparency Policy updated June 2018
7. SFI Labels & Claims
<http://www.sfiprogram.org/sfi-standards/labels-claims/>
8. Harris, J.B.C. et al, [Conserving imperiled species: a comparison of the IUCN Red List and U.S. Endangered Species Act](#), Conservation Letters 00 (2011)
9. "At risk or not: contrasting results of species at risk assessment processes", Darren J.H. Sleep, October 24, 2018
10. SFI database at www.sfidatabase.org, accessed on December 6, 2018.
11. Public audit reports available at <http://www.sfiprogram.org/audit-reports/>

Annex – Abbreviations

ADBE	Advisory Commission Sustainability Biomass for Energy applications
BMP	Best Management Practice
CB	Conformity Assessment Body
CoC	Chain-of-Custody
Commission	Advisory commission Sustainability Biomass for Energy applications
CSARA	Canadian Species at Risk Act
EU	European Union
ESA	Endangered Species Act
EZK	“Ministry of EZK” is the Dutch Minister of Economic Affairs and Climate Policy
FECV	Forests with Exceptional Conservation Values
FMU	Forest Management Unit
FWS	US Fish and Wildlife Service
GHG	GreenHouse Gas
HCV	High Conservation Value
ILUC	Indirect Land Use Change
IUCN	International Union for Conservation of Nature
OSHA	Occupational Safety and Health Standards
SFI	Sustainable Forestry Initiative
SFI FMS	SFI 2015-2019 Forest Management Standard
SFI CoC	SFI 2015-2019 Chain of Custody Standard
US	Unites States
USA	Unites States of America
WHO	World Health Organization