



Explanation of the changes in the certification scheme On the way to PlanetProof PP.5

Content

Ambitions	2
Products and crops to be certified & Inspection and consequences of nonconformities (Formerly Note to the reader)	2
Required bonus scores	2
1. Energy and climate	3
2. Crop protection	5
3. Biodiversity	8
4. Soil quality.....	10
5. Fertilisation	10
6. Water	11
7. Material use and Waste Flows.....	13
8. General requirements.....	14



Ambitions

The specific goals with milestones will be determined separately. With regard to the Biodiversity theme, the aim is that in 2026 every certificate holder in open soil-bound crops will have a non-productive area of at least 5% of the farm area, which will contribute to strengthening biodiversity. With this information, entrepreneurs can set up their business strategy in such a way that this goal can be achieved.

In 2023, the method to calculate the non-productive area will be established.

Products and crops to be certified & Inspection and consequences of nonconformities (Formerly Note to the reader)

These pages have changed in layout, adapted in text and information was added that formerly was included in requirements 2.12 (Residue research), 10.1 (Scope), 10.2 (Certification at crop or product level), 10.9 (on inspections and consequences of shortcomings). The text of these requirements (partly) contain regulations for the Certification Body for the inspection process, and did not set any requirements for the actions of the producer. Furthermore, the text has been adjusted due to the appearance of the separate schedule for On the way to PlanetProof Chain of Custody.

The part of the text that had no relevance to the actions of the producer has been removed from the requirements and included in these paragraphs.

The adjustments do not result in any new or changed requirements for the producers. The only change in the inspection process concerns the possibility to carry out the mandatory residue investigation at new certificate holders before, during or after the inspection moment, but prior to certification.

Required bonus scores

Requirement 0.0. Points score for optional measures and malus point compensation

- Malus points are completely covered with bonus points from the themes Crop Protection, Biodiversity and/or Soil Quality.
- Additional to the compensation of malus points the certified grower earns a minimum of 10 points (nothing changes for open-field cultivation; for protected cultivation it means an increase of three points).



1. Energy and climate

Requirements 1.1 and 1.2. Energy registration, emission calculation mandatory in open field crops

Recording energy consumption and the completion of the calculation module for greenhouse gas emissions is made mandatory for all cultivation sectors; until now was only for greenhouse horticulture. Motivation: greenhouse gas emissions due to energy consumption are an important point of attention for politics, society and NGOs that focus on sustainability.

In order to be able to show correct registrations during an inspection in 2024 and to be able to calculate greenhouse gas emissions, growers will have to do the registration in 2023.

Requirement 1.2. Emission information from supplier's invoice will be used

In the previous version, the average emission per kWh for electricity from the grid supplied without Guarantees of Origin was used as default value, according to official references for the relevant production country. European Directive 2009/72/EC requires that electricity suppliers inform their customers about the greenhouse gas emissions and nuclear waste associated with their electricity generation, as well as about the energy sources used. This offers an entrepreneur the opportunity to choose a supplier or a product with which lower emissions can be achieved.

Requirement 1.3. Protected crops: electricity consumption added to the limit

Until now, the emission limit only comprised emissions arising from the process of climate control (heating, cooling) of greenhouses. Electricity consumption is now also included in the limit.

The emission limit for climate management is supplemented with the product of the electricity consumption for operation \times 279 g/kWh (this corresponds to the emission per kWh of a CHP). Before doing this, the purchase and sale of electricity will be netted.

If nuclear-generated power is purchased, with which nuclear waste is produced, the emission standard will be lowered by:

$\begin{aligned} & \text{The number of kWh purchased mains power} \\ & \quad \times \\ & \text{Amount of nuclear waste in mg per kWh from the electricity supplier} \\ & \quad \text{(from the electricity label)} \\ & \quad \times \\ & \text{149 grams of CO}_2 \text{ equivalents} \end{aligned}$

This creates a more level playing field for growers in different parts of Europe, because nuclear power generation results in lower CO₂ emissions with equal power consumption, while creating environmentally harmful waste.

The calculation of the standard is, as before, done with the Calculation Module Greenhouse Gas Emission of SMK.



Requirement 1.4. Sustainable electricity

The requirement for sustainable electricity will also apply to open field cropping, with the option of phasing the introduction over a maximum of 3 years according to an own plan. Making the power supply more sustainable can be done independently of supply contracts: Guarantees of Origin (GoOs) can be purchased in addition to existing or new contracts.

Optional measure 1.6. Rewarding greenhouse gas emissions below the limit

The reward of option 1.6 for covered crops has now been aligned with the equivalent for open crops and growth room crops 1.10.

Optional measure 1.7. Generating sustainable electricity

The optional measure rewarding the purchase and generation of sustainable electricity for greenhouse crops will be discontinued, now that electricity is part of the standard and savings are rewarded via optional measure 1.6. Net supply to the grid of sustainable electricity will be an optional measure for open cultivation and cell cultivation.

1.8. New optional measure: Moment of electricity consumption & emission

Guarantees of Origin do not guarantee that electricity used at the moment is generated sustainably somewhere at that same time. In the energy market, it is expected within 1-2 years that instruments will become available that provide insight into the emissions per hour related to the actual electricity consumption. This option measure prepares for this development and provides the first impetus for conscious emission-dependent power purchase.

1.9 New optional measure. Reduction plan energy use and emissions (field crops and growth cells)

The cultivation systems, for which no emission limit applies, can earn bonus points with a reduction plan and its implementation. This also compensates for the cancellation of a number of optional measures under this theme, which mainly applied to crops in these cultivation systems.

Selection of optional measures for open field and growth room crops 1.10-1.16

Bonus points can be collected via 1.10 (Share of sustainable energy) and limiting emissions is stimulated for open field and growth room crops. The optional measures for using sustainable energy are therefore no longer available. In addition, optional measures stimulating energy saving also encourage emission reductions through energy savings. A selection has been made of optional measures that are not yet generally applied.



2. Crop protection

Requirement 2.3 Allowed plant protection products and biocides

The proposed changes are based on an update of the list of green products, low risk substances and basic substances (Annex 2b) and Lists I and II (Annex 2c).

New on list I

The following active substances have been newly assessed as risk substances and are added to list I, as there are more environmentally friendly alternatives for these substances:

- Bromadiolone (Rodenticide)
- Carbetamide (Candidate for Substitution)
- Flurochloridone (Candidate for Substitution)
- Halosulfuron methyl (Candidate for Substitution)
- Ipconazole (Candidate for Substitution)

New on List II:

The following active substances have been newly assessed as risk substances and are added to list II, because an environmentally friendly alternative is not available in the various crops:

- Benzovindiflupyr (Candidate for Substitution)
- Fluoxastrobin (top 10 BMA)
- Methoxyfenozide (Candidate for Substitution)
- Propyzamide (Candidate for Substitution)
- Prosulfocarb (Vewin List)

Relocated from List II to List I

The following active substances are relocated from List II to List I: (no longer allowed):

- Formaldehyde (biocide)
- Substances on List II that are no longer allowed are moved to List I. This adjustment prevents temporary admission of the following substances: bromoxynil, etridiazole, isopyrazam, mancozeb, prochloraz, propiconazole, thiocloprid, and thiophanate-methyl.

Removed from risk lists

- Active substances of which the permit or application period has expired for more than 2 years, are removed from the risk lists.
 - From List I are removed: chloorsulfuron, haloxyfop-p-methylester, methiocarb, methomyl, thiamethoxam and zeta-Cypermethrin.
 - From List II are removed: chloridazon, cyromazine, diflubenzuron, dimethoate, diquatdibromide, epoxiconazool, ethoprofos, fenamidine, lufenuron, spirodiclofen en teflubenzuron.
- Active substances where advancing scientific insight has shown that the risks are less serious than previously estimated. It concerns the former Candidates for Substitution: quizalofop-P-ethyl (list II), quizalofop-P-tefuryl (list I).
- Active substance that no longer exceed the drinking water quality standard: Thiabendazole (formerly on Vewin list) (List II).



Removed from the green products, low-risk substances list

- *Bacillus thuringiensis* subsp. *Tenebrionis* strain NB 176 (TM 14 1) has been removed from the list of green products, low-risk substances because the admission at European level has expired.

Requirement 2.8 Application of non-chemical control measures against pests

The following pests have been added to the list of mandatory non-chemical control (if control is carried out, it must be non-chemical).

- **Protected floriculture:** fungus gnat (control with nematodes or soil predatory mites).
- **Open-field cultivation (blueberry, gooseberry and black, white and red currant):** black vine weevil.
- **Tree nursery (shrubs, conifers, perennial plants indoor/outdoor):** larvae of the vine weevil (control with nematodes).
- **Arable crops (onions):** onion fly; if control is carried out, then it is mandatory to apply at list 1 of the following non-chemical control techniques: deployment of sterile mate technique or nematodes.

There is no non-chemical control method available against gall mite, therefore this pest has been removed from the list of pests on open-growing fruit.

Requirement 2.9 Weed management

There is a ban on weed control between the rows (between the cultivation free zone) of fruit and avenue trees. Weed management remains permitted on the cultivation free zone, in the row

Requirement 2.10 Active substance limits / Appendix 1

The active substance limit of a few crops will be reduced. The results of a feasibility study show that it is still feasible to grow under these limits.

Crop:	Current limit (kg/ha):	Proposed limit (kg/ha):
Blueberry (open field)	15	10,0
Blackberry (open field)	18	10,0
Raspberry (open field)	15	14,0
Plums (open field)	20	12,0
Red currant (open field)	24	18,0
Onions:		
- Onions from seed	14.0	10.0
- 1st yr plant onions	17.0	10.0
- 2nd yr plant onions	14.0	10.0
(Harvest after 1-8)	17.0	removed
- Shallots	17.0	10.0
<i>extra in years with high disease pressure downy mildew</i>	3.0	2.0

Regarding the onions: as a result of changes in the authorizations of fungicides and herbicides, the crop protection (IPM) can be realized with lower amounts of active substances. Therefore, the differences between plant types disappear.



SMK

Optional measure 2.19

Three new optional measures are added to the non-chemical control above-ground diseases and infestations in protected cultivation.

Optional measure 2.25

- Measure added to prevent superficial run-off via (sowing) tracks.
- Specified that a number of optional measures are only rewarded if the plots are located along water-carrying ditches or water bodies.
- Added that a larger cultivation-free zone must be covered with vegetation to prevent superficial run-off.



3. Biodiversity

Requirement 3.1 Obligatory number of bonus points

Open field crops

The minimum number of bonus points required is increased from 4 to 6 points.

Protected crops

Until now, protected crops had no obligatory criteria for biodiversity. From 2023, protected crops have acquired at least 2 bonus points on this theme.

New requirement 3.2. Site map (formerly 6.1B)

The nature and landscape elements are drawn on a site map including the plots that the company uses. The format of the map is free and is an obligation **from January 1, 2024**. The relation with water bodies and water flows is strong and these must therefore be included in the map, as well as any elements that bring risks and opportunities for biodiversity and water (required by SIFAV).

The map is the actual starting point for the Biodiversity action plan 3.3. and the reference point for requirement 3.4 (maintenance of biodiversity and natural elements).

Requirement 3.3 Biodiversity action plan

From 1 January 2025, soil-bound field crops will be obliged to draw up a biodiversity action plan. The provisional requirements for the plan are described in appendix 4. In 2023, a pilot will take place to draw up the plan (3.3/3.6), make the overview map (requirement 3.2) and to develop and test the calculation of the non-productive area for biodiversity. The requirements that will be imposed on the plan from the moment of obligation can therefore still be adjusted.

New requirement 3.4. Conservation of Biodiversity and Nature Elements

The aim of this requirement is that the actual volume of natural elements will be preserved.

Requirement 3.5. Prevention of light emission

This requirement formerly was presented as theme no. 7. As light screening was mainly prompted by the influence on nature and nuisance for citizens, it fits in well with the theme of biodiversity. The separate theme of light screening has thus been eliminated.

The requirement is simplified:

- (1) The possibility of special agreements has been removed: equal requirements for all growers;
- (2) differentiation by light levels has been removed: assimilation lights during the natural night is always at a level that affects nature. Moreover, the unit used (lux) does not apply to LED lighting.

Optional measure 3.6. Farm nature plan

This measure has been amended in text; appendix 4 provides more details about the requirements for the farm nature plan.



Optional measures 3.8, 3.9, 3.10, 3.11, 3.16, 3.19, 3.20, 3.22, 3.23, 3.24

Required efforts for biodiversity related to farm area

Larger companies then have to make a proportional effort and therefore will be required to have a larger area of the relevant elements in order to get the bonus points. In most cases, a minimum is imposed on the application of the measure.

Optional measure 3.10 Corner: cuttings/clippings are removed

This addition was missing; this contributes to the desired soil depletion (as in 3.18).

Optional measure 3.11. Green fallow

Fallow land has a clear contribution to biodiversity. It is therefore also included in European agricultural policy and national programmes. The required area has been copied from requirement 3.16 (unploughed field) with twice as many points, because it will make a stronger contribution to biodiversity during the growing season.

Optional measure 3.14. Crop diversity

Smaller plots lead to greater crop diversity. A greater variety of crops contributes to biodiversity, for example through more diversity of food and sheltering possibilities, and also because insects and other animals can take shelter in other crops when an operation or treatment (e.g. spraying) takes place in one crop.

Optional measure 3.16. Unploughed field

After harvesting root crops, a light tillage should be carried out to prevent surface runoff.

Optional measure 3.17. Monitoring biodiversity

An option has been added where companies can make their own biodiversity observations in a verifiable way, for example with the freely available ObsIdentify mobile app.

Optional measure 3.21. Vegetation water reservoir

The first part is new, the second part previously was included in requirement 6.19 (theme Water). This provides an additional optional measure that is particularly applicable in protected crops.



4. Soil quality

Optional measure 4.2 Prevention of soil erosion

After harvesting root crops, a light tillage should be carried out to prevent surface run-off.

Optional measure 4.9 Rest crops

This optional measure has been aligned with the new CAP (Common Agricultural Policy). The result is that there will be a reward when every 3 years rest crops are grown on a plot as the main crop. The option to reward a cultivation plan with a maximum of 50% root crops is no longer available.

5. Fertilisation

Requirement 5.9 and optional measure 5.15: Heavy metal content of compost

In practice, this requirement and optional measure are of little added value, because it has been found that most of the compost meets the standards for heavy metals. Both will be removed.

6. Water

Climate change threatens the availability of fresh water (both groundwater and surface water) across Europe. Groundwater levels in many European countries are declining, salinization plays a role in various places and water scarcity is a summer bottleneck for agriculture in many European regions. The extent to which this scarcity plays a role varies.

This leads to a number of water-related requirements in this revision that depend on water scarcity in a region. It follows on from the steps taken in response to SIFAV requirements to impose additional requirements on producers in “dry” countries, which have been determined using the Water Risk Filter <https://waterriskfilter.org/>.

The Water Risk Filter looks at several aspects related to water. On the way to PlanetProof uses the assessment of water scarcity: with a higher risk (on a scale of 1-5), some requirements become mandatory, and more effort is required by applying optional measures. The Water Risk Filter takes into account both total water availability and the variation between seasons and years in the risk score.

For requirements 6.3 - 6.6 and 6.8, the limit is set at the WRF water scarcity score of 3.5; this selection corresponds to what was called High-risk countries in the previous scheme version (requirements added in 2022 in response to SIFAV requirements). The same requirements apply to dry areas in other countries and areas with better water availability in the “dry” countries also see this reflected in the fact that fewer requirements are imposed on them.

Requirement 6.1 Obligatory points from optional measures

Based on the Water Risk Filter, a few bonus points are required. A default water scarcity risk score has been determined for each country. There may be areas in a country with a lower risk score: a certificate holder can determine the actual score of a production location via <https://waterriskfilter.org/>; if it falls into a lower class, fewer bonus points need to be collected. This is explained in Appendix 6.

Requirement 6.10. Analysis of water from sub-drainage pit (new for protected crops on substrate)

When a greenhouse facility is provided with a drainage pit from which water is discharged, this can be a route through which fertilizers and crop protection products end up in the environment. Sampling and analysis for nutrients present are therefore desirable, and a plan of approach to prevent these losses.

Requirement 6.18. N-emission limit for protected crops

The limit is shown in Appendix 7. In recent years, the N-emission limits for On the way to PlanetProof were always lower than the legal limit in the Netherlands. The legal limits for 2024 are not yet known; the limits of On the way to PlanetProof for 2023 are based on the expectation of the legal limits for 2024. The legal limit in the Netherlands will be virtually zero in 2027. Based on the development of regulations in the European countries involved and cultivation practice, the Board of Experts will annually determine new limits for the following year.



Optional measure 6.21 Recording irrigation demand (formerly requirement 6.3)

Determining the crop's irrigation needs and recording this data is no longer an obligation. For a number of soil-bound field crops in North-Western European countries, this may be the most important measure to achieve the required bonus point on the theme of water.

Former optional measure 6.16 Rainwater collection expires

The collecting system of rainwater from company buildings (including greenhouses and facilities for growth rooms) is no longer rewarded. Having a collection system does not mean that collected water is put to good use. The new requirements 6.23 (open field crops) and 6.24 (for protected crops) replace this.

Optional measure 6.23 Surface water retention (New)

The availability of irrigation water in the growing season is increasingly critical. Raising the groundwater level with the measures mentioned contributes to better water availability.

Optional measure 6.24. Use of more sustainable water (New)

Use of sustainable water is stimulated with the aim of reducing water abstraction from ground and surface water for agricultural use. Use of (possibly treated) waste water flows from other industries and both above- and underground buffering of water are eligible for rewards as more sustainable water.

Optional measure 6.26. Condensation water for irrigation (extra option)

The option to use condensation water from air treatment installations as an irrigation water source has been added.

Optional measure 6.27. Efficient irrigation (extra options)

Two options for more efficient irrigation have been added to the requirement.

Optional measure 6.28. Automated irrigation (New)

By automating irrigation, irrigation errors are reduced, and the efficiency of irrigation is increased.

Optional measure 6.29. Irrigation uniformity check (New)

Heterogeneity of the irrigation is a cause of water wastage in soil-bound crops.

Optional measure 6.30. Prevent discharge and leakage

Unconscious discharges and leakage from irrigation and drain systems are an important cause of contamination of surface waters with fertilizers and crop protection products. The optional measure rewards maintenance of water technical installations (drain and irrigation systems). Measurements in the drainage pit have been moved to the mandatory measure 6.11.



7. Material use and Waste Flows

Theme 7 replaces the merged themes 8 (Waste and Cleaning) and 9 (Packaging).

Requirement 7.3 (former 8.3) permitted cleansing agents

The use of hydrogen fluoride (HF) and formaldehyde are banned and added to the list in Annex 2C. Both substances are very harmful to health and the environment. There are other means that clean sufficiently.

New requirement 7.4 Use of responsibly produced peat

Worldwide the use of peat in agricultural production is strongly disputed because of the damage to ancient peat landscapes. Since 2022, the Responsibly Produced Peat label has been in place. This quality label promotes the preservation and restoration of peat extraction areas.

Requirement 7.5-7.11 and optional measures 7.20-7.28 Packaging

The packaging requirements are harmonised with the requirements in the Chain of Custody scheme. These requirements already apply to trading and packaging companies who want to be certified. The same requirements therefore apply to primary entrepreneurs who pack products. In practice, it will suffice for the entrepreneur who uses packaging at the request of another company, to ask this party to provide evidence on packaging compliance.

Requirement 7.5 is a new requirement for the number of bonus point to be obtained by optional measures regarding packaging. This requirement corresponds to the one in the Chain of Custody scheme. The points obtained with optional measures regarding packaging no longer count towards the total number of points to be obtained.

New optional measure 7.15 More sustainable organic substrates

The purpose of this optional measure is to promote substitute materials to replace peat in substrates, if attention is paid to a more favourable footprint.



SMK

8. General requirements

Requirements for trade and retail

Certified trading companies and certified producers that purchase and sell products must comply with the requirements in the On the way to PlanetProof Chain of Custody scheme as of 2022. The relevant requirements are no longer part of the On the way to PlanetProof Plant Products scheme.

The communication requirements will remain in the Plant Products scheme, because communication can also be applied by producers. These requirements are no different from the On the way to PlanetProof Chain of Custody scheme.

Requirement 8.3 Open-field or protected cultivation (former 10.3)

The option to include a combination of cultivations under one cultivation, is included in the certification scheme. It is permitted for open-field cultivations with a limited share of protected cultivation (which is used for open cultivation, e.g., propagation or wintering) to include this in the certification. The limits used will be reduced from a maximum of 30% and maximum of 1 ha to a maximum of 10% and a maximum of 2,500 m².

With a higher percentage or a bigger surface area the cultivation system has a substantial contribution to the business operations which justifies a separate registration.