

Sustainable Eel Group (SEG) Standard Assessment

Palingkwekerij Bardoel

Assessment against:

- **Component 1:** Core requirements.
- **Component 4:** Eel buying and trading.
- **Component 5:** Eel farming.

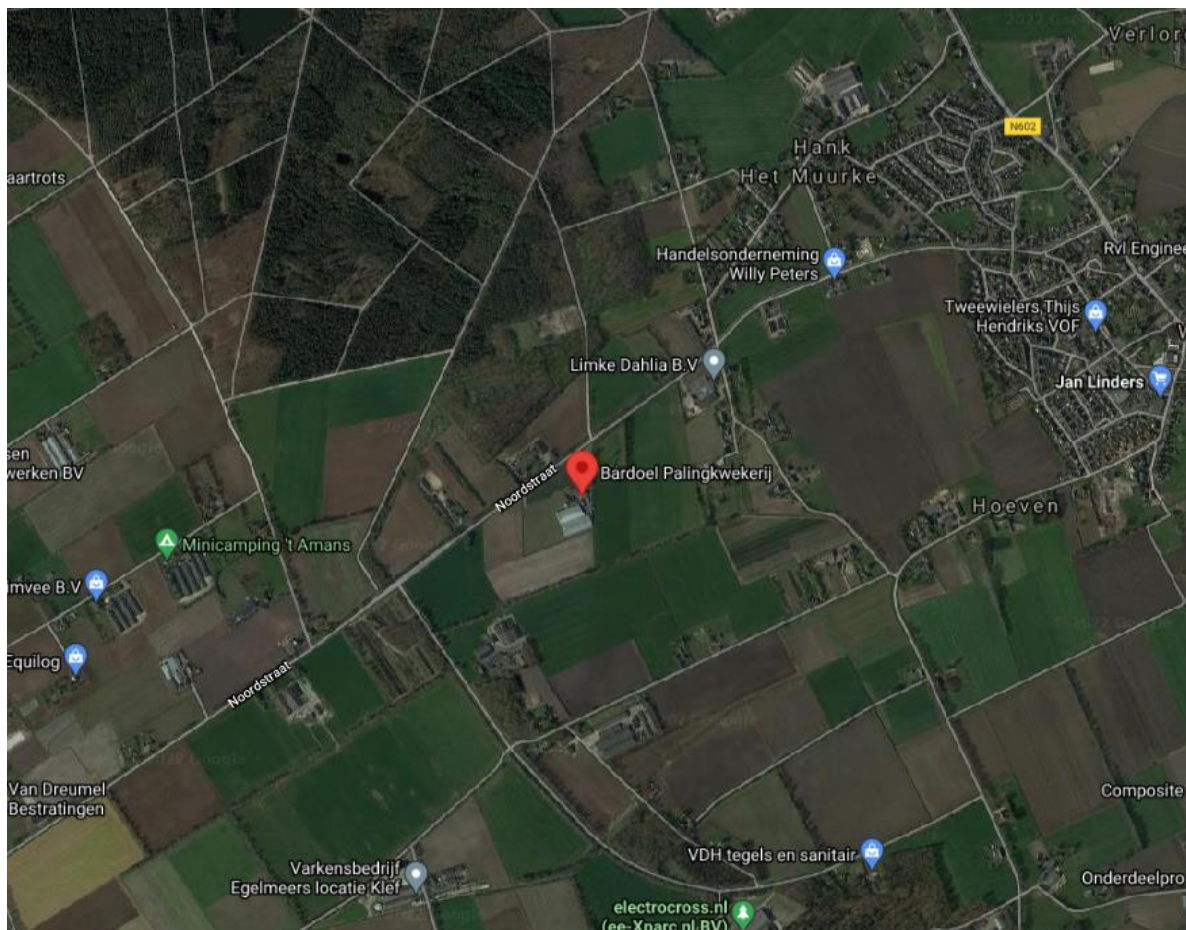
Completed by: Andres Fellenberg van der Molen	On-Site Visit: 18 November 2021	Report date: 28 December 2021
Reviewed and approved by:	Mr. David Bunt Sustainable Eel Group	Certification Body 2 February 2022
This version has had commercially sensitive information removed to meet Data Protection requirements.		

FINAL REPORT

Scope

This document represents the report completed following the 2021 audit carried out under the Sustainable Eel Group (SEG) Standard (Version 6.0a, Dec 2019) for Palingkwekerij Bardoel . This assessment has been conducted against Components 1, 4 & 5 of the standard.

The assessment is of a farming and trade of Eel operation located at Noordstratt 23, Wanroij, 5446 XC, The Netherlands



1. Introduction

Wanroij is a village in the Dutch province of North Brabant. It is located in the former municipality of Sint Anthonis, about 9 km west of the town of Boxmeer. Wanroij was a separate municipality until 1994 when it became part of Sint Anthonis. Since 2022 it has been part of the new municipality of Land van Cuijk. The estimated amount of inhabitants is 4800.

Eel farm Bardoel is a Brabant eel farm with a small traditional smokehouse and home sales. The farm is located in rural Wanroij, in North-East Brabant. The farm started in 1997 and is run by Mr Gijs Bardoel. The family strives to breed eels sustainably to bring an honest quality product to the market, a pure product without artificial additives. The company works with care and dedication throughout the year to ensure that the Eel grows optimally. The Eel is then processed by hand into a traditional quality product.

Eel farm Bardoel has been farming European Eel since 1997. During the first few days, the glass eels are fed cod roe, after which they are slowly acclimatised to crumb food. Less than 1.5 kg of feed is needed to produce 1 kg of Eel, mainly of vegetable ingredients. The glass eels are then raised under strictly controlled conditions for an average of 16 months to produce eels weighing 130-200 grams, after which they are ready for smoking.

The farm received in the season 2020 904Kg of glass eels, where 20% is reserved for restocking. Almost one tone is entered into the farm in the four systems, each with six tanks allowing for multiple

Batches, this section simultaneously acts as a quarantine area for eels entering the farm. On a separate building exist two systems, each of them with 14 tanks and 12 tanks respectively used for the on-grown eels up to 1.2kg. A second section with 28 tanks on a single water system is maintained exclusively for fingerlings. All tanks have a circular form and are supplied by a 'feed on demand' feeding system.

The farm counts with a small, almost domestic, slaughter and processing area with a traditional smoking oven to produce artisanal smoked eels for local clients only. The operations are so small the farm does not need to comply with HCCP regulations or permits.



2. The assessment

The assessor was Andres Fellenberg Van der Molen from Green Partner Audits & Consultancy B.V, who visited Palingkwekerij Bardoel on 18th of November 2021. The audit included the interview with Mr [REDACTED]

2.1 Client Contact Details

Client Contact Name	[REDACTED] Owner Palingkwekerij Bardoel
Client Address	Noordstratt 23, Wanroij, 5446 XC, The Netherlands
Client Email	[REDACTED]
Client Phone Number	[REDACTED]

3. Results of the assessment

The outcome of this assessment is as follows;

Component 1: General Requirements			Auditor's findings	Weighting	Score
1.1	Commitment to Legality		Responsible	1	1
1.2	Contribution to eel conservation projects		Responsible	1	1
1.3	The facility trades in certified responsibly sourced eels		Responsible	1	1
1.4	Traceability				
	1.4.1	Incoming products, separation and segregation	Responsible	1	1
	1.4.2	Outgoing products	Responsible	1	1
	1.4.3	Record keeping and documentation	Responsible	1	1
1.5	Biosecurity & welfare				
	1.5.1	Eel Fishing	Not Applicable	0	0
	1.5.2	Eel buying & trading	Responsible	1	1
	1.5.3	Eel farming	Responsible	1	1
	1.5.4	Restocking	Responsible	1	1
	1.5.5	Wholesale / Retail / Processing	Responsible	1	1
Total				10	10/10
Percentage Responsibility Score				100%	

Component 4: Eel buying and trading.		Auditor's findings	Weighting	Score
4.0	Segregation of certified and uncertified Eel	Responsible	2	2
4.1	The Glass Eel holding facility is a registered Aquaculture Production Business	Responsible	2	2
4.2	Mortality in storage facility	Responsible	2	2
4.3	Mortality during transport and initial holding if transported to farm	Responsible	2	2
4.4	Water quality	Responsible	1	1
4.5	Handling and welfare	Responsible	1	1
4.6	Transport	Responsible	1	1
4.7	The required percentage of glass eels is being used for restocking	Not Applicable	0	0
Total			11	11/11
Percentage Responsibility Score			100%	

Component 5: Eel farming			Auditor's findings	Weighting	Score
5.1	The total mortality rate during the culture process is low		Responsible	2	2
5.2	The fish meal/oil ingredients in the feed come from a responsible source		Responsible	2	2
5.3	Feed is used as efficiently as possible		Responsible	2	2
5.4	Water quality		Responsible	2	2
5.5	There are minimal ecological impacts from effluent discharge		Responsible	1	1

5.6	Grading, slaughter and transportation are carried out with respect to welfare	Responsible	1	1
5.7	The farm provides Eel for restocking	Responsible	1	1
5.8	Eels for restocking are not graded out slow-growers	Responsible	1	1
Total			12	12/12
Percentage Responsibility Score			100%	

Summary of assessment and scoring		
Component	Aspiring	Responsible
1	0	10
4	0	11
5	0	12
Total	0	33
Total Responsibility Score		33/33 = 100%

4. Auditor conclusions

- **Component 1 General Requirements:** Palingkwekerij Bardoel has scored 100% for Component 1; it should be considered **RESPONSIBLE** under the SEG standard.
- **Component 4 Eel buying and trading:** Palingkwekerij Bardoel has scored 100% for Component 4; it should be considered **RESPONSIBLE** under the SEG standard.
- **Component 5 Eel farming:** Palingkwekerij Bardoel has scored 100% for Component 5; it should be considered **RESPONSIBLE** under the SEG standard.
- **With an overall Responsibility score of 100%,** Palingkwekerij Bardoel can be considered as **RESPONSIBLE** under the SEG standard and suitable for certification.

5. Recommendations:

It is recommended that the following improvements are implemented before the next audit:

1. Record all the company's social activities, including awareness and training about SEG and sustainability.
2. Add the SEG logo to Palingkwekerij Bardoel printing and stationery, particularly the paper where the invoices are printed.

3.

- Procure glass eels in 2021 from only suppliers who prove the Eel's reliability, document the whole process effectively, and certify SEG.
- The company presents a high level of sustainability practices, including heat recovery, waste management, water management and sustainable building design.
- The company acquires and repairs old machinery instead of buying new, giving it a new life.
- New facilities are being built. These comply with various aspects of sustainability and animal welfare.



6. Next Audit

After the audit, the client was assessed against the risk assessment set out in the methodology, set out in the table below.

Questions	Performance of the Client at Audit	YES	NO
1	Has the client been part of any external investigation which may be of concern to SEG AND/OR been suspended from any other certification standard?	Enhanced Surveillance	Go to Q2
2	Has the client received a borderline (*) pass for a Component in its previous audit?	Enhanced Surveillance	Go to Q3
3	Does the client only buy and sell product (does not physically handle it?)	Minimum Surveillance	Go to Q4
4	All other scenarios	Standard Surveillance	

	Certification Audit	Year 1	Year 2	Year 3	Year 4 Recertification Audit
Minimum Surveillance	On-site Audit	Remote Audit	Remote Audit	Remote Audit	On-site Audit
Standard Surveillance	On-site Audit	No Audit	On-site Audit	No Audit	On-site Audit
Enhanced Surveillance	On-site Audit	On-site Audit	On-site Audit	On-site Audit	On-site Audit

As the client has been seen to fall into the Standard Surveillance bracket, the next audit will be due in December 2023 (in 2 years) and shall be an on-site audit.



Andres Fellenberg Van der Molen
Accredited SEG Assessor

7. The Assessment

The tables below give the assessment for each of the criteria in the standard and a rationale for the scores given above.

Component 1 – Generic requirements	
Criterion 1.1: Commitment to legality	
Responsible indicators	For at least the past two years: the organisation has not been found guilty for any offences relating to eel fishing or trading.
Aspiring indicators	For at least the past 12 months: the organisation has not been found guilty for any offences relating to eel fishing or trading.
Discussion	At the time of the assessment, the company declared that there had been no legal proceeding against the company under the evaluation in the past two years. There were no ongoing investigations either.
Score	Responsible
Criterion 1.2: Contribution to Eel Conservation Projects. (Optional bonus score)	
Responsible indicators	The organisation donates at least 2% of its profits or at least 20% of its corporate responsibility programme to projects that make a positive contribution to eel conservation or population enhancement, such as Eel Stewardship Funds, River Restoration projects, conservation and education projects.
Aspiring indicators	The organisation donates 1 – 1.99% of its profits or 10 - 20% of its corporate responsibility programme to projects that make a positive contribution to eel conservation or population enhancement, such as Eel Stewardship Funds, River Restoration projects, conservation and education projects.
Discussion	The company's profits are paid into DUPAN on a range of 5-7%. This is a yearly contribution. Once a month, it is reported to DUPAN how much has been sold. €0.50 per kgs of round eels are then paid to DUPAN. Palingkwekerij Bardoel is part of NeVeVi, The Dutch Association of Fish Breeders. NeVeVi unites fish farmers in the Netherlands. The association consists of Dutch fish farmers of various fish species, including Eel. The association maintains contacts with science, education, government, trade partners and the entire broad field of aquaculture. <i>Refer to evidence 1:1:1</i>
Score	Responsible
Criterion 1.3: The organisation trades in certified responsibly sourced Eel	
Responsible indicators	The organisation trades in at least 50% (by number) of certified responsibly sourced Eel and has the documentation to demonstrate that.
Aspiring indicators	The organisation trades in 10 – 49.9% (by number) of certified responsibly sourced Eel and has the documentation to demonstrate that.
Discussion	
Score	Responsible

Criterion 1.4: Traceability	
1.4.1: Traceability - Incoming product, separation and segregation	
Responsible indicators	<ul style="list-style-type: none"> • Certified and uncertified eel products can be clearly and easily traced back to their source. • Where a fishery or buyer, an electronic tele-declaration system is used • It operates a clear system which ensures that the product remains separated at all stages from arrival to dispatch from non-certified eel products. • The organisation ensures that any products wishing to make a claim as certified do not contain any non-certified eel-based ingredients. • If resolved through mass- or number- balance calculations, the margin of error does not exceed 2%
Aspiring indicators	<ul style="list-style-type: none"> • Certified and uncertified eel products can be traced back to their source. • If segregation is not possible, there are clear and auditable records of the numbers of certified and uncertified eels entering the organisation at each facility • It can demonstrate through auditable records that the number of certified eels exiting the organisation in a year did not exceed the number that entered • If resolved through mass- or number- balance calculations, the margin of error does not exceed 5% or if a farm, the 2800 pieces per 1 kg of glass eels is applied.
Discussion	<p>The farm has an effective control system to avoid mixing suppliers. Each 2020 batch is identified in a "LOT" assigned a specific traceability number. There are digital records and appropriate documentation. According to Dutch regulations, the eels can be traced for up to seven years through documentation. It should be noted that the batches still contain eels that do not come from a reliable source as even the two suppliers that are SEG certified have not yet been able to reach a 100% level. Therefore, the farm has 67% SEG suppliers and a level of 57% responsible Eel.</p> <p><i>Refer to Criterion 1.3</i> <i>Refer to Evidence 1:1</i></p>
Score	Responsible
1.4.2: Traceability - Outgoing product	
Responsible indicators	<ul style="list-style-type: none"> • Where a fishery or buyer, an electronic tele-declaration system is used • Documentation is well maintained with a maximum of 2% error in the following: • The organisation correctly uses batch-coding for labelling certified product, which can be on the packaging for the product, or included in the documentation (e.g. invoice) with the assignment • All product to be sold as certified by an organisation is accompanied by an invoice which meets the following criteria: <ul style="list-style-type: none"> - Includes an appropriate batch code - Includes a record of the quantity (no. & weight) of product and to whom it was sold
Aspiring indicators	<ul style="list-style-type: none"> • Documentation is well maintained. If resolved through mass- or number- balance calculations, the margin of error does not exceed 5% in the following (or if a farm, the 2800 pieces per 1 kg of glass eels is applied): • The organisation correctly uses batch-coding for labelling certified product, which can be on the packaging for the product, or included in the documentation (e.g. invoice) with the assignment • All products to be sold as certified by an organisation are accompanied by an invoice which meets the following criteria: <ul style="list-style-type: none"> - Includes an appropriate batch code - Includes a record of the quantity (no. & weight) of product and to whom it was sold
Discussion	<p>Palingkwekerij Bardoel uses correct and accurate batch coding for product labelling and invoicing, including the order number, batch identification and traceability numbers required by the Dutch authorities and customers. Two of the three suppliers of Palingkwekerij Bardoel deliver complete documentation per batch, including the INTRA code and full traceability from the catch of the glass eel, including the names of the fishermen and their boats and the original signed documentation.</p>

	<i>Refer to Evidence 1:3</i>
Score	Responsible
1.4.3: Traceability - Record keeping and documentation	
Responsible indicators	<ul style="list-style-type: none"> The organisation operates a system that allows the tracking and tracing of all Eel from purchase to sale and including any steps in between. In the case of live eels this should include the ability to track each batch delivered to a buyer to be connected back to a water, a time period (maximum duration one month) and specific fisherman/vessel If a fisherman or buyer, a tele-declaration system is used to report catches and trade The organisation operates a system that also allows for the completion of a batch reconciliation of eel product by weight over a given period. The organisation maintains records for a minimum of three (3) years.
Aspiring indicators	<p>The above requirements are met except that:</p> <ul style="list-style-type: none"> Records have been maintained for less than three (3) years If a fisherman or trader, a tele-declaration system is planned to be used to report catches and trade in the next season
Discussion	<p>Palingkwekerij Bardoel keeps records for seven years to date, following Dutch regulations. The batch numbering of the supplier also accompanies eels received from an SEG source. The growth of fish is monitored regularly, and therefore the weight of fish within separate systems is monitored closely. Each sale of live eels is given a batch number defined by the company, specifying weight and size. A copy of this record is sent to the customer, while the original is kept for the company's internal records. Considering the records and on-site evidence, Palingkwekerij Bardoel has solid record-keeping, documentation, and internal traceability in place.</p> <p><i>Refer to Evidence 1:4</i></p>
Score	Responsible
Criterion 1.5: Biosecurity & welfare – Eel and eel products are provided with minimal risk of diseases, parasites and alien species	
1.5.1: Eel Fishing: Biosecurity measures are adopted	
Responsible indicators	<ul style="list-style-type: none"> The fishery conducts good biosecurity measures such as the disinfection and drying of nets and equipment between each fishing in different waters. OR: The fishermen only operate in the same river or estuary, with no risk of transferring diseases or alien species between catchments
Discussion	Not Applicable
Score	Not Applicable
1.5.2: Eel buying & trading: Biosecurity is present and disease is treated rapidly and appropriately	
Responsible indicators	<ul style="list-style-type: none"> The use of chemicals follows legal requirements of the appropriate EU regulations and of the country concerned. The facility has the appropriate permissions to operate from the relevant licensing authority An effective and documented biosecurity plan is in place and there is evidence that it is being followed. Records are available showing regular monitoring of health and possible signs of stress according to the facility's plan (including the completion of microscope parasite checks) and daily mortality is recorded. Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility.

Aspiring indicators	<ul style="list-style-type: none"> • The use of chemicals follows legal requirements of the appropriate EU regulations and of the country concerned. • The facility has the appropriate permissions to operate from the relevant authority • An effective and documented biosecurity plan is in place and there is evidence that it is being followed. • Eels are regularly monitored for health and possible signs of stress (although this might not be documented) and daily mortality is recorded. • Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility.
Discussion	<p>The volume of chemicals used is so small that the effect on the water quality is virtually non-existent. There are suitable biosecurity measures in place. No outside personnel are allowed onto the premises. Palingkwekerij Bardoel has all the relevant permits and licences to operate as a company following the provisions of the Dutch authorities for the cultivation, processing and sale of fishery products. The company holds permits issued by the Dutch Food Standards Agency under number [REDACTED]. Palingkwekerij Bardoel has eliminated almost all use of medication and has focused on maintaining the health of the eels by guaranteeing an excellent level of water quality. Eels arriving at the facility are placed in separate systems to eels already present as a form of quarantine. The facility usually uses pH as a form of controlling disease outbreaks. In the remote case, that medication is required for the eels; this is defined via veterinary approval.</p> <p><i>Refer to Evidence 1:4:1</i></p>
Score	Responsible
1.5.3: Eel farming: Biosecurity is present, and disease is treated rapidly and appropriately	
Responsible indicators	<ul style="list-style-type: none"> • The facility has the appropriate permissions to operate from the relevant authority. • The use of chemicals follows legal requirements of the EU and of the country concerned • An effective and documented biosecurity plan is in place and there is evidence that it is being followed. • Daily records are available showing monitoring of fish health and signs of stress and daily mortality is recorded • Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility • UV is used at an appropriate level and separation between tanks
Aspiring indicators	<ul style="list-style-type: none"> • The facility has the appropriate permissions to operate from the relevant licensing authority • The use of chemicals follows legal requirements of the EU and of the country concerned. • An effective and documented biosecurity plan is in place and there is evidence that it is being followed. • Eels are regularly inspected for disease (although this may not be documented) and daily mortality is recorded. • Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility.
Discussion	<p>Palingkwekerij Bardoel is listed by the Public register of Authorised aquaculture production businesses number [REDACTED] following the regulations of Article 6 of Directive 2006/88/EC implemented in Article 2.2.1 of the Dutch aquaculture Regulation, updated in April 2020. The company has eliminated almost all use of medicines and has focused on maintaining the health of the eels by ensuring an excellent level of water quality. In the unlikely event that medication is required for the eels, this is defined through veterinary approval. The company has a detailed daily record showing the monitoring of the health of the eels, including signs of stress and daily mortality.</p> <p>Palingkwekerij Bardoel does not have a UV system on-site, and the level of water quality used was on-site controlled during this 2021 audit. The nursery water does not contain any artificial additives. All water used in the nursery passes through a recirculation system. This means that all the water used is reused. This ensures extremely low energy consumption. The water in the tank is renewed</p>

	constantly. The water passes through a filtration system and then returns to the tanks. Waste goes to the farm's own water purification system. The waste is separated from the water, and the water disappears into the sewage system. In addition, there are all kinds of heat exchangers and all the waste heat is recovered. <i>Refer to Evidence 4:3</i>
Score	Responsible
1.5.4: Restocking: The risk of restocked eels introducing disease into wild populations has been assessed and is minimal	
Responsible indicators	Eels are tested before restocking and found to be free of disease AND/OR eels are from a known source which is tested on at least an annual basis and known to be free of disease.
Aspiring indicators	Eels are tested before restocking when first sourced from a new area, and periodically (at least annually) thereafter to ensure they are free from disease.
Discussion	The eels are under control concerning diseases; therefore, this is a part of the daily work process. The eels must pass the internal control before they leave the premises. Mr Bardoel directly controls this process, and without his supervision, the eels do not leave the company. The company provides all documentation requested by customers and authorities in the international market appropriately. In all cases, it is always the intention of the company to deliver eels that are free of disease in all instances. Considering that the eels come partially from a known source already controlled by SEG, it is possible to establish their traceability in case of sickness.
Score	Responsible
1.5.5: Wholesale / Retail / Processing: Hygiene Plans are followed and there are rare examples of infection	
Responsible indicators	Food processing hygiene plans are followed
Discussion	Palingkwekerij Bardoel does process food but on a small scale. The company has all permissions to operate as a farm and visually is easy to define Palingkwekerij Bardoel facilities as adequately managed. It is so minimum that it can be defined as "domestic". The Dutch authorities do not request the farm to count with special permits or HCCP certifications. <i>Refer to Evidence 1:5:1</i>
Score	Responsible
Component 4 - Eel buying and trading	
Criterion 4.0: Segregation of certified and uncetified eels	
Weighting: 2	
Responsible indicators	Certified and non-certified are kept separated, from point of collection through holding to sale and onward transport
No Aspiring indicators	
Discussion	The process of separation of SEG and non-SEG eels is strictly applicable via "LOTs" numbers and registration for Palingkwekerij Bardoel considering season 2020, as they work with two SEG suppliers have a level of 57% glass eel responsible. From season 2021, the suppliers are only SEG. <i>Refer to Evidence 4:1</i>
Score	Responsible
Criterion 4.1: The Glass Eel holding facility is a registered Aquaculture Production Business	
Weighting: 1	
Responsible indicators	The Glass Eel holding facility is a registered Aquaculture Production Business
Aspiring indicators	The facility is not a registered Aquaculture Production Business, but has credible plans to register within the next 6 months
Discussion	

	registration as a fish processor under SBI number code 1020 following the policy and regulations set by national and EU Common Fisheries Policy (CFP) and rules for aquaculture. <i>Refer to Evidence 1:4:1</i>
Score	Responsible
Criterion 4.2: Mortality in storage facility	
Weighting: 2	
Responsible indicators	Mortality rate over the season is less than 2% on average.
Aspiring indicators	Mortality rate over the season is less than or equal to 5% on average but greater than or equal to 2%
Discussion	According to the information provided by Mr Bardoel and revised on site, mortality is less than 1.0%, presenting an effective form of control. <i>Refer to Evidence 4:2</i>
Score	Responsible
Criterion 4.3: Mortality during transport and initial holding if transported to farm	
Weighting: 2	
Responsible indicators	Buyers source at least 90% of their eels from certified suppliers OR Mortality during transport and for the first week at the farm is less than 2% on average
Aspiring indicators	Buyers source 50% - 89.9% of their eels from certified suppliers OR Mortality during transport and for the first week at the farm is less than or equal to 3% on average but greater than or equal to 2% on average.
Discussion	The Glass eels purchased are sourced by a 67% SEG-certified supplier, and the eels in Palingkwekerij Bardoel are currently 57% SEG-certified, with the intention to achieve a 100% in 2021-2022
Score	Responsible
Criterion 4.4: Water quality	
Weighting: 1	
Responsible indicators	A system is in place that is expected to keep key water quality parameters within suitable tolerances for healthy eel survival (e.g. Ammonia, Suspended Solids, pH, oxygen) Water quality management procedures are in place including regular monitoring of relevant parameters which shows that water quality is always high and stable The facility operates a back-up system to ensure that water quality will not adversely affect survival rates in the case of an equipment failure
Aspiring indicators	A system is in place that is expected to keep key water quality parameters within suitable tolerances for healthy eel survival (e.g. Ammonia, Suspended Solids, pH, oxygen) The facility has a minimum of a back-up generator and oxygen supply
Discussion	Water quality plays an essential role at Palingkwekerij Bardoel, as water control has made it possible to eliminate diseases and avoid supplying the eels with medicines. The water is coming from a deep well of 144 metres, and it is constantly monitored. Ammonia, solids, pH, and oxygen levels are checked regularly. The company Normec under register number KvK [REDACTED] controlled six water parameters via laboratory analysis. Palingkwekerij Bardoel has the appropriate permits related to groundwater rights. The company employ effective systems of filtration, resulting in clean breeding water. All water used in the nursery passes through a recirculation system. This means that all the water used is reused. This ensures extremely low energy consumption. <i>Refer to Evidence 4:3</i>
Score	Responsible
Criterion 4.5: Handling and welfare	
Weighting: 1	
Responsible indicators	Systems are in place and the facility is designed to keep handling to an absolute minimum Documented procedures are in place for handling, and handling, where necessary, is careful

	The infrastructure is designed to avoid injuries, and so that the use of nets is rarely necessary. When used, nets are small-mesh (1mm maximum) Eels are moved without being allowed to dry out.
Aspiring indicators	The facility may not be optimally designed, but systems are in place to avoid handling as much as possible within the constraints of the facility Handling, where necessary, is carefully planned and executed The infrastructure has been optimised as far as possible to avoid injuries Nets are small-mesh (1mm maximum) Eels are moved without being allowed to dry out.
Discussion	Palingkwekerij Bardoel facilities are optimised as much as possible to avoid handling to prevent injuries. The auditor checked the entire handling without presenting substantial evidence of handling and eel welfare deficiencies. <i>Refer to Evidence 4:4</i>
Score	Responsible
Criterion 4.6: Transport	
Weighting: 1	
Responsible indicators	There is a Transport Plan in place to minimise travel time – this meets the Transport requirements for vertebrates Packing is done in a way that minimises handling, time and stress Eels are kept cool and wet with an adequate supply of oxygen The operator holds the relevant transport authorisations
Discussion	Palingkwekerij Bardoel transport process from aquaculture to customers is minimum. Customers usually come with their own vehicles to pick up the Eel, and Palingkwekerij Bardoel makes it easy for them to load the vehicles most efficiently and effectively without damaging the eels welfare. Handling is minimum, minimising time and stress. The client's vehicles are equipped with appropriate systems following all Dutch and European regulations in this matter. <i>Refer to evidence 4:4</i>
Score	Responsible
Criterion 4.7: The required percentage of glass eels is being used for restocking	
Weighting: 2	
Responsible indicators	The buyer can provide documented evidence that <u>they have sold</u> at least 60% for restocking the required target percentage of its glass eels from the last season for the primary purpose of conservation / escapement.
Aspiring indicators	The buyer can provide documented evidence that they <u>have reserved or made available at least 60%</u> of the required target percentage of its glass eels from the latest season available for the primary purpose of conservation / escapement, OR The buyer can provide documented evidence that it has made available glass eels to the maximum level possible within the constraints of the implementation of the EMP in that country OR The buyer can provide credible evidence that restocking will occur in the forthcoming season.
Discussion	Palingkwekerij Bardoel has sufficient evidence with which it has demonstrated that at least 32% has been sold for the primary purpose of conservation/escapement. This means 695.533 pieces. This evidence is shown in the source document with the respective INTRA codes and documentation. All Eel sold for restocking went to just one client [REDACTED] dividend on three orders in separate periods. Corresponding to the prior glass eels purchased destined for restocking.
Score	Not Applicable Farm Refer to 5.7




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Criterion 5.4: Water quality	
Weighting: 1	
Responsible indicators	<ul style="list-style-type: none"> A system is in place that is expected to keep key water quality parameters within suitable tolerances for healthy eel survival (e.g. Ammonia, Suspended Solids, pH, oxygen) Water quality management procedures are in place including regular monitoring of relevant parameters which shows that water quality is always high and stable Water quality monitoring is linked to an alarm-based system in the event of a sudden drop in water quality The facility operates a back-up system to ensure that water quality will not adversely affect survival rates in the case of a power supply failure.
Aspiring indicators	<ul style="list-style-type: none"> A system is in place that is expected to keep key water quality parameters within suitable tolerances (e.g. Ammonia, Suspended Solids, pH, Oxygen) Water quality management procedures are in place and there is regular monitoring of relevant parameters which shows that water quality is always high and stable.
Discussion	<p>Water quality plays an essential role at Palingkwekerij Bardoel, as water control has made it possible to eliminate diseases and to avoid supplying the eels with medicines.</p> <p>The water is constantly monitored, and ammonia, solids, pH, and oxygen levels are checked regularly. Palingkwekerij Bardoel has the appropriate permits related to groundwater rights. The company employ effective systems of filtration, resulting in clean breeding water. All water used in the nursery passes through a recirculation system. This means that all the water used is reused. This ensures extremely low energy consumption. Oxygen reserves are kept at the facility in case any of the systems require immediate saturation, should one of the oxygenation systems fail or require maintenance. Water quality monitoring is linked to alarm systems in case of any sudden incidents concerning water quality. In addition, the entire water circuit is connected to an emergency generator to ensure the eels' survival and maintain a constant water cycle in the event of a power failure.</p> <p><i>Refer to Evidence 5:2</i></p>
Score	Responsible
Criterion 5.5: There are minimal ecological impacts from effluent discharge	
Weighting: 1	
Responsible indicators	<ul style="list-style-type: none"> The system is closed-circuit and has no discharge OR Effluent discharge is regularly tested by the farm AND Effluent discharge complies with all local and national requirements AND Has not been found to be non-compliant in the past 5 years.
Aspiring indicators	<ul style="list-style-type: none"> Effluent discharge is regularly tested by the farm AND/OR Has been found to be non-compliant on no more than 1 occasion in the past 5 years.
Discussion	<p>The management handles the discharge and water management, where the waste generated by the aquaculture process is effectively managed, and the energy recovery has been added to this. The waste is removed periodically and given to local farmers to fertilise their land. No records have been found to indicate any infringements regarding the quality of the water discharged from the installation.</p> <p>Palingkwekerij Bardoel follows the municipality's plans as stipulated in the Municipal Sewage Plan.</p> <p><i>Refer to Evidence 5:3</i></p>
Score	Responsible
Criterion 5.6: Grading, slaughter and transportation are carried out with respect to welfare	
Weighting: 1	
Responsible indicators	<ul style="list-style-type: none"> Grading is completed in an efficient manner Slaughter is completed by a method that provides an instant death or renders them insensible to pain, i.e. electric stunning or percussive stunning. Procedures are in place to ensure transportation provides suitable conditions for fish welfare.

Aspiring indicators	<ul style="list-style-type: none"> Other, previously acceptable methods of stunning before slaughter are used, e.g. chilling, but there are credible plans in place to invest in the latest methods within the next 2 years
Discussion	<p>Palingkwekerij Bardoel has a 4-size grading machine. This machine fulfils the function of sorting the eels in an efficient way where the air pump moves the eels. The company does not have a slaughtering process in the facilities. Live eels leave the Palingkwekerij Bardoel facility via logistical transports, which are entirely provided by Palingkwekerij Bardoel customers. Cooling before transport is carried out in separate tanks following grading where eels are lowered in temperature gradually from 22°C to around 14°C over one week to habituate and purge eels before final weighing, loading and transportation and processes do not allow to let the eels go without water or dry out.</p> <p><i>Refer to evidence 4:4</i></p>
Score	Responsible
Criterion 5.7: The farm provides Eel for restocking	
Weighting: 2	
Responsible indicators	The farm can provide documented evidence that 10% or more of the farm's annual eel production (by piece) has been provided for restocking for the purpose of conservation / escapement.
Aspiring indicators	The farm can provide documented evidence that it makes 10 % of their annual eel production (by piece) available for restocking for the primary purpose of conservation / escapement AND/OR for new clients, the farm can demonstrate that they have bookings for re-stocking in the following year at more than 10% of the predicted annual eel production (by piece) for the purpose of conservation / escapement.
Discussion	
Score	Responsible
Criterion 5.8: Eels for restocking are not graded out slow-growers	
Weighting: 2	
Responsible indicators	The size range and quantities in the eels for restocking reflect 100% that for the age group in the whole farm
Aspiring indicators	The size range and quantities indicate no more than a 25% supplement of those for restocking are from slower growing fish of the same age group
Discussion	Eels purchased for restocking do not undergo sorting processes. They, therefore, reflect and represent the actual state of glass eels from where they were caught and are kept separate from eels intended for processing and human consumption. Consequently, the size range received and the quantities of eels for restocking reflect 100% of the age group received, unaltered and unmanipulated.
Score	Responsible

8. On-site Evidence per Component

Component 1			
Evidence	Evidence	Evidence	Description
1:1			
1:1:1	<div><div><p>NeVeVi NEDERLANDSE VERENIGING VAN VISKWEKERS</p></div><div><p>NeVeVi</p><p>De vereniging onderhoudt contacten met wetenschap, onderwijs, overheid, handelspartners en het gehele brede veld van aquacultuur.</p></div></div> <div><div><p>Sustainable Eel Group</p></div><div><p>De Sustainable Eel Group is een Europese organisatie die samen met verschillende partners onderzoek uitvoert naar de instandhouding en het herstel van de palingstand.</p></div></div> <div><div><p>ESF</p></div><div><p>Eel Stewardship Fund</p><p>Het Eel Stewardship Fund is opgericht om activiteiten te financieren die bijdragen aan het herstel van de palingstand in de Europese binnenwateren.</p></div></div>		<p>Palingkwekerij Bardoel presents to the public via their webpage the commitment to Eel.</p>

1:2			The farm has separate tanks, and each batch is managed separately and is not mixed to avoid cross-contamination between eels.
1:3			




1:4		Receive documentation batch and electronic and manual documentation available on site.									
1:4:1	<p style="text-align: center;"><i>BIJLAGE I</i> MODEL VOOR AQUACULTUURPRODUCTIEBEDRIJVEN DIE VIS HOUDEN (ALS BEDOELD IN ARTIKEL 2, LID 2, ONDER a)) Informatie overeenkomstig artikel 59 van Richtlijn 2006/88/EG</p> <table border="1"> <thead> <tr> <th>Informatie</th><th>Kwekerij 1</th><th>Kwekerij 2</th></tr> </thead> <tbody> <tr> <td>1. Aquacultuurproductiebedrijf</td><td> 1.1.1. Naam aquacultuurproductiebedrijf: Palingkwekerij Bardoel B.V. 1.1.2. Adres of ligging van de kwekerij: Noordstraat 23, 5446 XC Wanroij </td><td> 1.2.1. Naam van: — het aquacultuurproductiebedrijf — de kwekerij 1.2.2. Adres of ligging van de kwekerij </td></tr> <tr> <td>2. Registratienummer (voor elke kwekerij)</td><td>2.1. Vergunningnummer: 6884</td><td>2.2.</td></tr> </tbody> </table>	Informatie	Kwekerij 1	Kwekerij 2	1. Aquacultuurproductiebedrijf	1.1.1. Naam aquacultuurproductiebedrijf: Palingkwekerij Bardoel B.V. 1.1.2. Adres of ligging van de kwekerij: Noordstraat 23, 5446 XC Wanroij	1.2.1. Naam van: — het aquacultuurproductiebedrijf — de kwekerij 1.2.2. Adres of ligging van de kwekerij	2. Registratienummer (voor elke kwekerij)	2.1. Vergunningnummer: 6884	2.2.	Information in accordance with Article 59 of Directive 2006/88/EG
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2. Registratienummer (voor elke kwekerij)	2.1. Vergunningnummer: 6884	2.2.									

1:5:1



Slaughtering, processing and smoking of eels is minimal. The farm has adequate health and hygiene averages which are visible to the public during this audit.



Component 4			
Reference	Evidence 01	Evidence 02	Description
4:1	  		<p>The tanks are clearly separated. The eels are not mixed in each tank. Each tank represents individual, isolated batches.</p>

4:2		<p>Mortality is controlled in detail with a daily log. Each tank presents individuals who register and maintains a low mortality level.</p>
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4:3

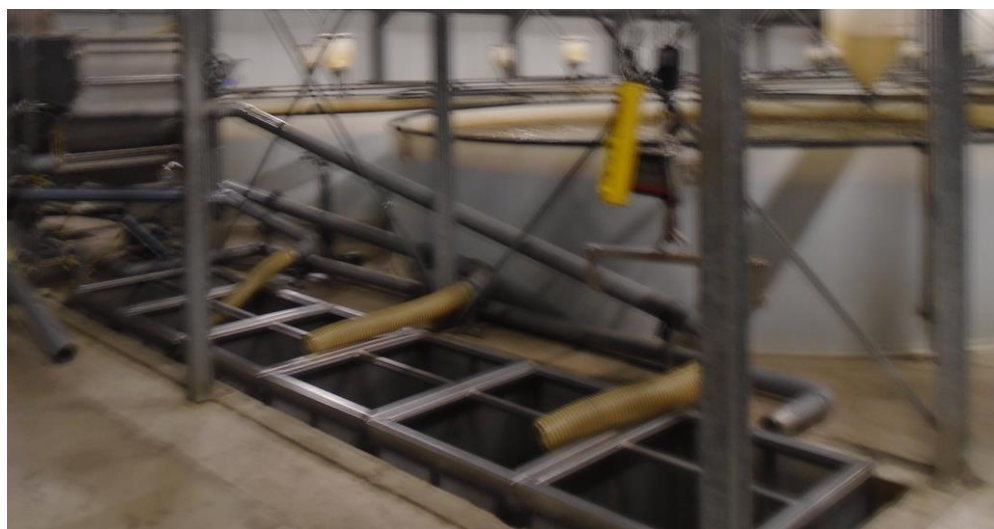




The water comes from a deep well of 144 metres. The water quality and control are monitored daily. Water is strictly controlled.


4:4



The handling of the eels is minimal, and the company takes care to minimise contact with the Eel. The machinery is suitable to minimise possible damage to the Eel.



Component 5			
Reference	Evidence 01	Evidence 02	Description
5:1			The tanks are clearly separated. The eels are not mixed in each tank. Each tank represents individual, isolated batches.
5:2	  		<p>The water comes from his deep well of 144 metres</p> <p>The water quality and control are monitored daily.</p> <p>Emergency systems and alarms are implemented in the farm's operations in case of failure.</p>

5:3		<p>The waste is removed periodically and given to local farmers to fertilise their land. A heat recovery system is present.</p>
5:4	