

WhiteFish standarden:

Egenevaluering av bærekraftighet og miljøregnskap

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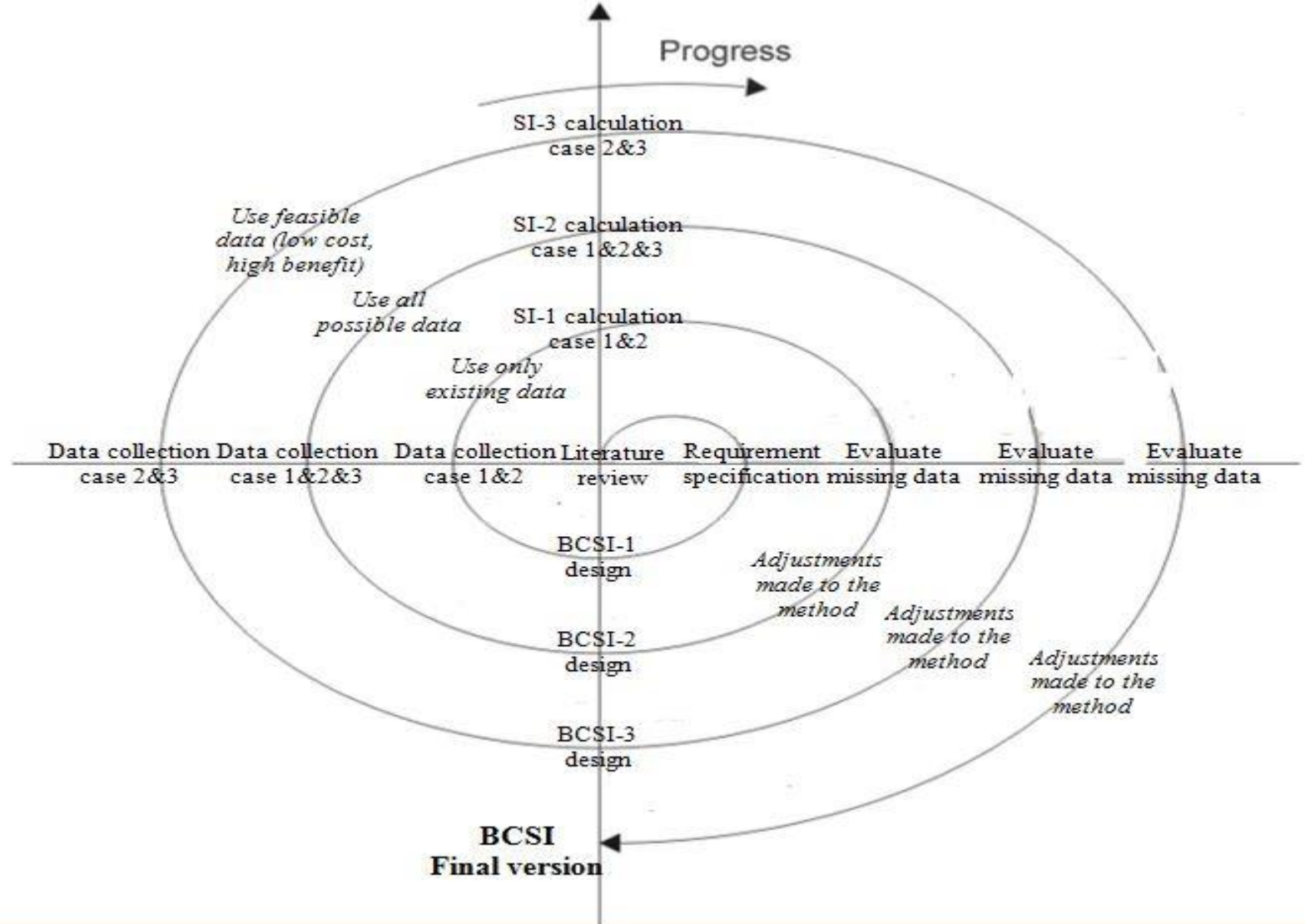
Råfisklaget

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Overall objective

The overall WHITEFISH objective is to strengthen the competitiveness of the European cod and haddock industry by documenting and disseminating the relevant and desirable characteristics the products have, in particular in relation to sustainability, environmental impact and transparency.

Spiral development model



Previous CWA experience

1. From 2000-2002 the EC-funded TraceFish project ran, and the main outcome of this projects was two standards for seafood product traceability.
2. In 2003 the TraceFish standards were published as CWA 14659 / 14660 “Traceability of fishery products — Specification of the information to be recorded in farmed / captured fish distribution chains”.
3. These voluntary industry standards were used by the industry, mainly upstream, and mainly for benchmarking purposes. The standards were translated into various national languages, and aspects of the standards were incorporated into proprietary solutions and into legal requirements.
4. CWAs last for 3 years, and can be renewed if they are still is use. CWA 14659 / 14660 were renewed with no changes in content in 2007.
5. In 2008 ISO established a working group with a mandate to develop proper certifiable ISO standards for seafood traceability; ISO TC234/WG01. The first drafts of the new ISO standards were to a large degree based on CWA 14659 / 14660.
6. In 2010 ISO TC234/WG01 delivered the ISO 12875 / 12877 “Traceability of finfish products — Specification on the information to be recorded in captured / farmed finfish distribution chains”, based on the CWAs.

WhiteFish CWA process

1. Business plan produced and distributed
2. Open kick-off meeting announced, invitations sent
3. Kick-off meeting in Tromsøe on June 3rd 2014
4. At meeting – outline of proposed CWA content (SME-menu)
5. At meeting and after – get input on preferable options
6. Sep 2014 – distribute CWA in proper format
7. Sep-Oct 2014 – hearing process
8. Nov 2014 – modify standard, make final draft
9. Nov 2014 – consensus meeting in Iceland, final feedback
10. Dec 2014 – make final version of CWA, submit to CEN

Scope of the standard

The objective of this CWA is to establish recommendations and voluntary standards relating to batch-based documentation of sustainability impact. If you are a fisherman, a vessel owner and a processor and you want to calculate sustainability on batch level, the CWA will tell you what data you should record, and how that data should be interpreted.

Limitation of the standard

It is worth pointing out that this is mainly intended for self-assessment and for monitoring own sustainability over time.

Perhaps some time in the future a standard can be made that is rigid and exact enough to enable comparison between different food business operators, but this entails so many considerations and such a level of detail that it is beyond the scope of this workshop to provide it.

Main users

- fishermen, fishing vessel owners and other suppliers of wild caught fish
- processors, transporters and buyers of wild caught fish, e.g. wholesalers or supermarket chains
- research institutes with focus on sustainability and related research
- Non-Governmental Organizations (NGOs)
- certification organisations

Set-up assistance needed

- Establish actual emission factors for fuel, refrigerants, etc
- If used for self-assessment in processing, establish which resources significantly contribute to environmental emissions

Social sustainability

Provide self-declaration in standardised form

Provide a checklist for annual self assessment

1. Freedom of association and collective bargaining
2. Timely payment of salaries
3. Pension fund contributions
4. Worker safety
5. Employees' job satisfaction
6. Employees' professional pride
7. Healthy working environment
8. Wage or salary level

Stock / fishery sustainability

The standard does not provide separate requirements for assessing stock / fishery sustainability; have to rely on existing advice

Provide self-declaration in standardised form

Provide a checklist for annual self assessment

1. Identify all fisheries the company participates in
2. For each fishery, provide descriptive status or link to descriptive status document
3. For each fishery, provide quantitative status or link to external evaluation of quantitative status (ICES, certification agency, etc).

Economic sustainability

Mainly for internal use, for comparing economic sustainability with other aspects of sustainability

More detailed economic analysis in other systems

1. Profit per batch
2. Labor used per batch
3. Net weight per batch
4. Fuel use per batch

Examine not only whether profit is high (positive) and labor use is low, but also the variability of the data which translates to production risk.

Environmental impact

- Impact on climate change, measured in kg CO₂ equivalents (per kg fish product)
- Impact on ozone depletion, measured in kg CFC-11 equivalents (per kg fish product)
- Impact on particulate matter, measured in kg PM_{2,5} equivalents (per kg fish product)
- Impact on ionizing radiation, measured in kg U₂₃₅ equivalents (per kg fish product)
- Impact on acidification, measured in kg molc H⁺ equivalents (per kg fish product)
- Impact on human toxicity – cancer, measured in kg CTUh (per kg fish product)

Environmental sustainability

Provide self-declaration in standardised form

Provide a checklist for continuous self assessment

For fishing operation:

1. Fuel type used
2. Fuel amount used
3. Refrigerant type used
4. Refrigerant amount used
5. Vessel / hull / gear component type
6. Vessel / hull / gear component allocated per batch / kg

Enables calculation of impact per kg fish

Environmental sustainability

For processing operation:

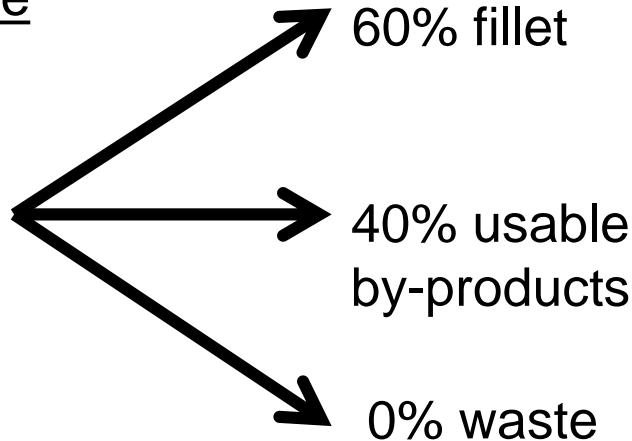
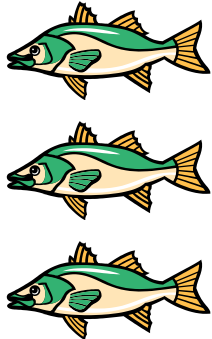
1. Total environmental impact for the fish processed
2. “Allocation fraction” – how much of this environmental impact should be assigned to this processing operation
3. Resource type used in processing
4. Resource amount used in processing

Enables calculation of impact per kg fish

Allocation fraction

The “Life Cycle Assessment” methodology (which underlies the WhiteFish standard) says that “all emissions generated by a process must be allocated to the process outputs”.

100 kg CO₂e



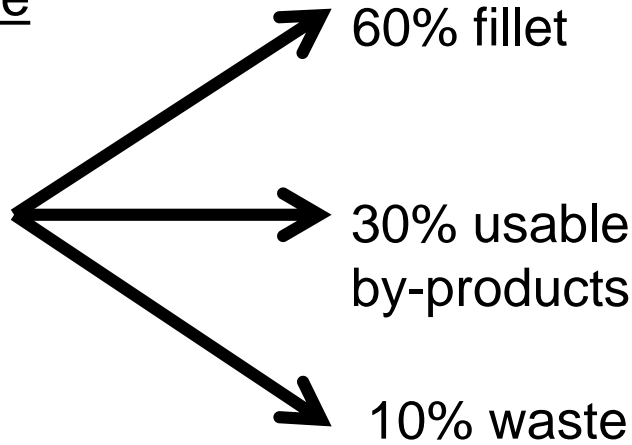
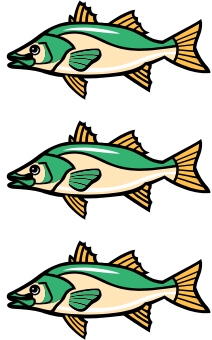
60 kg CO₂e

40 kg CO₂e

**Allocation
fraction = 60%**

Allocation fraction

100 kg CO₂e

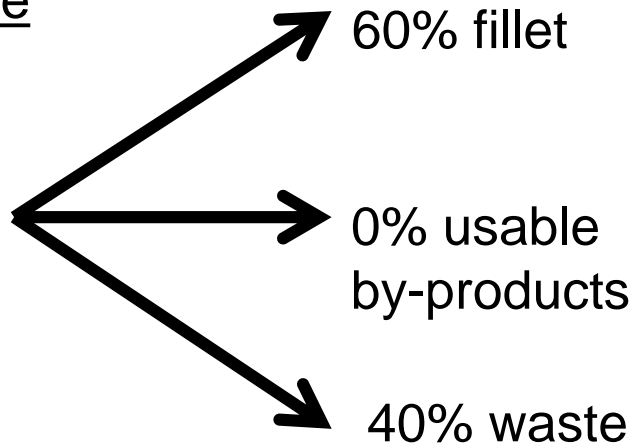
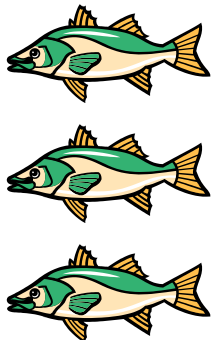


67 kg CO₂e

33 kg CO₂e

Allocation fraction = 67%

100 kg CO₂e



100 kg CO₂e

Allocation fraction = 100%

Allocation fraction = yield% / (100-waste%)

Environmental sustainability

For transport:

1. Total environmental impact for the fish transported
2. Transport type used
3. Transport distance for given transport type

Enables calculation of impact per kg fish

Impact calculation - fishing

Batch number:	CBatch140330	CBatch net weight:	12116 kg
THE CLIMATE CHANGE CONTRIBUTION FROM THE CATCH LINK			
Fuel/ Refrigerant type	Amount used (kg)	kg CO ₂ e per kg	Sum kg CO ₂ e
MSD	5682	3,74	21250,68
MGO	77	3,73	287,21
Lubricating oil	34	4,27	145,18
Ammonia	0,27	2,10	0,57
R22 (HCFC22)	0,03	1885,84	56,58
Sum kg CO ₂ e for this batch			21740,21
kg CO ₂ e / kg fish product for this batch			1,79

Impact calculation – processing

Production batch number:	PBatch212333	A - PBatch net weight:	1493 kg
THE CLIMATE CHANGE CONTRIBUTION FROM THE CATCH LINK			
B – Total kg CO ₂ e for all the inputs to this process (for the catch used in this process)			4464,91
C – Percentage / fraction of the total kg CO ₂ e “received” that is assigned to the output of this process (taking into account yield, waste and by-products)			60%
D - Sum kg CO ₂ e for this PBatch, the contribution from catch (B*C)			2678,95
THE CLIMATE CHANGE CONTRIBUTION FROM THE PROCESSING LINK			
Resource type	E - Total resource amount used for this batch	F - kg CO ₂ e per amount of resource used	Sum kg CO ₂ e (E*F)
Electricity - Hydropower	80 kWh	0,0055 kg CO ₂ e / kWh	44,00
Packaging material - Cardboard	77 kg	2,51 kg CO ₂ e / kg	193,27
Water	2000 l	0 kg CO ₂ e / l	0,00
G - Sum kg CO ₂ e for this PBatch, the contribution added in production			237,27

**Pre-configured
spreadsheets with
some pre-defined
calculations...**

Conclusions on value-adding - 1

- **This sort of value-adding is a bottom-up process. Companies must (already) be motivated and see the opportunities.**
- **To go beyond individual already motivated companies and self-assessment is a large undertaking that must be industry driven if it is to succeed.**
- **For motivated companies R&D and standardization initiatives of this type are very relevant. It provides them with a scientific basis for what they want to do, and it harmonises and reduces the work involved.**

Conclusions on value-adding - 2

- **Self-assessment does not support inter-company benchmarking and it can only to a limited degree be used to substantiate consumer-facing claims.**
- **The companies report that the competitive advantage is mainly gained through carrying out the self-assessment (and telling their customers about it); not through the results that come out of it.**
- **Good data recording practice and traceability systems (both internal and external) is a prerequisite for companies who want to do this.**

Thank you for your attention

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