

PUBLICLY AVAILABLE SPECIFICATION

PAS 2050-2:2012

Assessment of life cycle greenhouse gas emissions

Supplementary requirements for the application of PAS 2050:2011 to seafood and other aquatic food products



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Credit: NOAA's Fisheries Collection

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Foreword

This Publicly Available Specification (PAS) is published by BSI Standards Limited, under licence from The British Standards Institution, and is expected to come into effect in November 2012.

This PAS was prepared at the request of seafood industry representatives, sponsored by the Sea Fish Industry Authority (Seafish) in the UK by Jonna Meyhoff Fry as Technical Author. This was supported by a Steering Group and wider network of stakeholders drawn from the global seafood and aquatic food products industry. The members of this Steering Group are listed below and their valuable contribution is gratefully acknowledged here:

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Comments from other parties were also sought by BSI, at a meeting held in conjunction with the World Fisheries Congress Edinburgh in May 2012, where world fisheries experts contributed through a series of discussions around key topics and through the period of 'Expert Review and Public Comment' which took place during June 2012. The expert contributions from all the organizations and individuals contributing to the development of this PAS are also gratefully acknowledged.

Use of this document

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.



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Introduction

As an industry, the provision of seafood and other aquatic food products compares well with other proteins with regard to its emissions of greenhouse gases. However, there is no room for complacency and there is growing industry recognition that there will always be room for improvement in this area, right across the supply chain.

In response to this, the British Standards Institution, with the support of seafood industry representatives and sponsorship from Seafish, has brought together an international group which includes representatives drawn from many areas of the world with strong fishing and aquaculture interests, to establish a common approach for the industry to assess its GHG emissions and enable informed action to reduce those emissions globally and locally.

This group has gathered and shared current knowledge on emissions from fisheries and aquaculture production units across the world and developed a common understanding of the aquatic food products industry, leading to a broad consensus on how greenhouse gases from seafood and other aquatic food products can best be assessed, using the methodology provided by PAS 2050:2011.

The relationship with PAS 2050:2011

This Publicly Available Specification (PAS), PAS 2050-2, contains requirements for the assessment of life cycle greenhouse gas (GHG) emissions specifically associated with seafood and other aquatic food products. The requirements are supplementary to those specified in PAS 2050:2011, which provides a generic method for assessing the life cycle GHG emissions of goods and services.

The purpose of this PAS is to provide supplementary requirements and additional guidance for the consistent application of PAS 2050:2011 to seafood and other aquatic food products, by providing:

- a fisheries and aquaculture focus for aspects of the PAS 2050:2011 assessment where options are permitted;
- rules or assessment requirements that are directly relevant to the main sources of emissions from capture fisheries and aquaculture; and
- clarity on how to apply specific elements of the PAS 2050:2011 assessment within the seafood sector.

In conjunction with PAS 2050:2011, this PAS provides a common and comprehensive method for the reliable, repeatable assessment of GHG emissions from the whole life cycle of seafood and other aquatic food products. The supplementary requirements provided in this PAS relate only to the cradle-to-gate stages of the life cycle, where in this case cradle-to-gate includes distribution until the product reaches the retailer, food service or similar gate. For feed production, retail, food service and all subsequent stages (e.g. retail, use and end-of-life) the requirements of PAS 2050:2011 apply.

PAS 2050:2011 sets out generic requirements for undertaking a GHG emissions assessment of all aspects of the life cycle of aquatic food products, whilst this PAS provides supplementary requirements and additional guidance on those elements that have been found to present particular challenges in an aquatic food products context, such as allocation, system boundaries and land use change. Although, hitherto, it has been possible for those experienced in the use of PAS 2050:2011 to achieve acceptable assessment outcomes using PAS 2050:2011 alone, for new or less experienced users the use of this PAS in conjunction with PAS 2050:2011, in an assessment of the GHG emissions from seafood or other aquatic food products, can be expected to ensure greater accuracy and uniformity of application.

Because of the global nature of trade in seafood and other aquatic food products, it is essential that the supplementary requirements provided in this PAS are applicable wherever an assessment of emissions from aquatic food products is to be made. The development of PAS 2050-2 has therefore been undertaken with participation by experts from different countries with experience in a range of seafood and other aquatic food production systems.

Relationship with other GHG assessment standards

PAS 2050 was introduced in 2008 (revised in 2011) with the aim of providing a consistent internationally applicable method for quantifying the GHG emissions of products and services. In 2011, another product life cycle assessment method was published by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) that in addition to providing a methodology to quantify the GHG inventories of products, also included requirements for public reporting. Both standards are broadly consistent in their quantification methods, but their differing objectives have resulted in some variation in approach.

The Product Life Cycle Accounting and Reporting Standard built on the initial PAS 2050 method in developing its own requirement. In turn, the PAS 2050 drew upon lessons learned during the Product Standard's development process in its 2011 revision. As a result of this cross collaboration, the key methodological rules underpinning quantification in both standards are consistent and in particular approaches to the following are in alignment:

- sector or product rules;
- inclusion of biogenic carbon;
- recycling;
- land-use-change; and
- delayed emissions.

While both PAS 2050:2011 and the Product Standard provide requirements for quantifying the GHG impact of a product over its lifetime, the Product Standard

includes requirements for public reporting whilst the PAS 2050:2011 approach focuses on recording of information to support the assessment process. As a result, while harmonization on all aspects of the assessment was sought during the development of both standards, some differences do remain but these are of relatively minor significance.

Annex H provides a review of each aspect of the compared methodologies, identifying any differences between them, and the implication for the assessment outcome.

Importantly, both standards provide a consistent approach to promoting the use and development of sector specific rules – known as “product rules” in the Product Standard and “supplementary requirements” in PAS 2050:2011. This approach recognizes the importance that sector/product specific rules can have in aiding consistent application of the standards within sectors. As further supplementary requirements are developed, it is expected that those same criteria may be applied to either standard to bring further consistency in product carbon assessments internationally.

Other GHG assessment methods relevant to at least part of the range of aquatic food product covered by this PAS will be found under the International EPD System which provides a PCR Basic Module, referenced CPC Division 04 *Fish and other fishing products*.

Norway has published Product Category Rules (PCR) for preparing an Environmental Product Declaration (EPD) for wild caught fish, although this is believed to be under revision.

Note The International Standards Organization (ISO) is also developing a standard for the carbon footprint of products (ISO 14067) with which collaboration is on-going.



1 Scope

This Publicly Available Specification (PAS) establishes supplementary requirements for use in conjunction with PAS 2050:2011 for the cradle-to-gate assessment of the GHG emissions from seafood and other aquatic food products derived from both wild capture and aquaculture production.

This PAS is appropriate for use by organizations operating in the seafood and other aquatic food product sectors that are intending to undertake a programme of GHG emission reduction of their product life cycle, or those needing to provide information on the GHG emissions from their products or processes to downstream business partners or other stakeholders (e.g. environmental regulators).

This PAS has been developed in accordance with the principles on supplementary requirements as set out in PAS 2050:2011 4.3 and follows the structure and form of that PAS. Due to the specific circumstances of the seafood and other aquatic food products sectors, and the choices left open to practitioners in PAS 2050:2011, this PAS provides clarity on the issues associated with those choices and establishes supplementary requirements, in particular with regard to system boundary, allocation and land use change. It clearly identifies where PAS 2050:2011 requirements are to be applied without supplement, and provides sector-specific requirements and guidance, where permitted by PAS 2050:2011.

The scope of this PAS is limited to the cradle-to-gate stages of the life cycle, which for aquatic food products for human consumption is from fisheries or broodstock management to the incoming gate of the retail or food service and for animal consumption, is from fisheries or broodstock management to the incoming gate of the feed supplier. This is illustrated in Figure 1 below. Where an assessment of aquatic food products is to extend beyond distribution (i.e. to include retail/food service, use and end-of-life), the requirements of PAS 2050:2011 should be applied to the subsequent stages.



Credit: NOAA's Fisheries Collection Photographer: William L. High, NMFS

Figure 1 The scope of PAS 2050-2 in the context of PAS 2050:2011

