

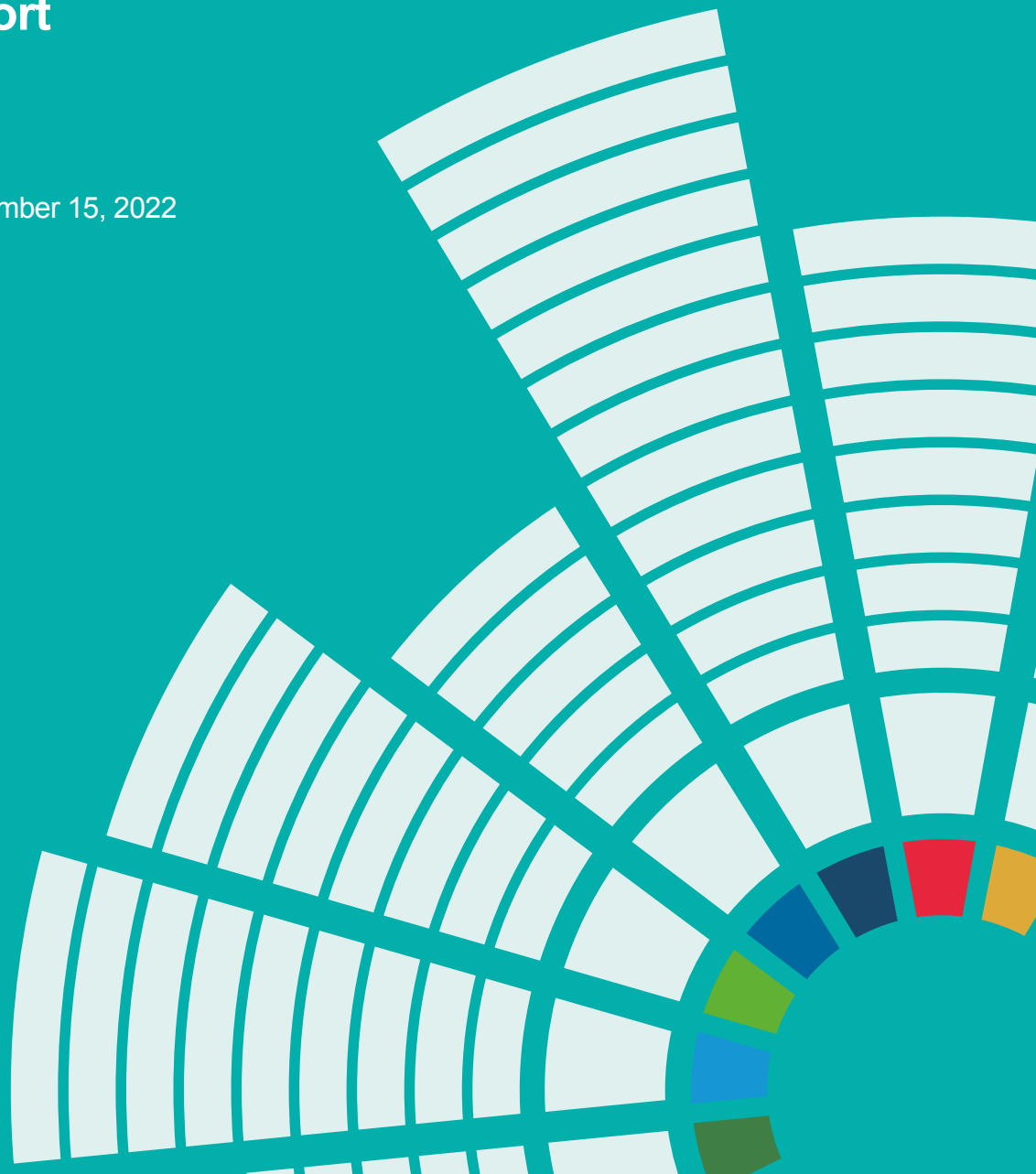
How Responsible Aquaculture can contribute to the UN's Global Sustainable Development Goals (SDGs)



Summary Report

2022

Report published on December 15, 2022



Executive Summary

We, at the Aquaculture Stewardship Council (ASC), believe in a world where aquaculture plays a major role in supplying food and social benefits for mankind, whilst minimising negative impacts on local communities surrounding the farm

We live in a world where our biosphere and the Anthropocene are nearing tipping points, and planetary boundaries are being transgressed. Scientists believe that human activity has significantly altered the earth, which is now subject to global warming, habitat loss, animal extinctions, and changes in the chemical composition of the atmosphere, oceans and soil.

As a result, there is an urgent need to address sustainability challenges holistically, and include social responsibility. This is precisely the ASC Mission. Recognising the specificities and complexities required to farm fish or shellfish sustainably, using metric performance levels and setting a bar high enough to drive industry transformation in its wake, the ASC is setting the standard for seafood with a dozen species-specific standards, including a Seaweed Standard managed jointly with the Marine Stewardship Council (MSC) and a Feed Standard. ASC also provides strong assurance throughout the value chain via MSC's Chain of Custody certification. Every step of the way is subjected to stringent requirements that are third-party audited. To ensure transparency of process, all audited reports are made publicly available on the ASC website.

On the international political scene, the United Nations (UN) have designed a truly universal and transformative framework of their own to deal with the global challenges, in the form of 17 interconnected Sustainable Development Goals (SDGs), which were launched in 2015, with a goal of achieving them by 2030. Whilst not all of the SDG targets are specifically applicable to global aquaculture or to all/

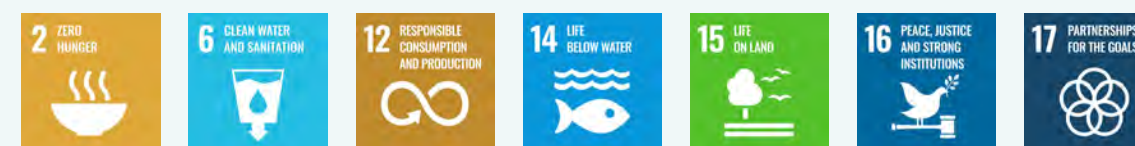
any operations, roughly half (49%) can be considered to be within our sphere of influence and material to the ASC's work. We are now firmly in the decade of action for the SDG and half-way through this 15-year journey, and every day's news brings a reminder of how intertwined the environmental, social and economic issues are, and the consequences of not addressing them. Benchmarking ASC's alignment with and performance towards the UN's 169 SDGs targets is deemed paramount in order to have a baseline from which we can drive continuous improvement and help both ASC and stakeholders to understand where more can be done to assure and ensure a prosperous, responsible and sustainable aquaculture industry for the future.

Assessing one's performance against the 17 SDGs is not an easy task, but working out how to measure it quantitatively against the 169 SDG targets is even more arduous. The targets are not always tailored towards aquaculture, and our research showed that assessing industry performance against SDG targets has not been addressed to date in a comprehensive manner, beyond tentative and qualitative mapping. Furthermore, much of the SDG claims made at corporate level are based on either self-declaration, or by relying on third party certifications which do not publish the relevant sustainability data. This brings with it a danger of unverified and unverifiable claims leading to greenwashing, which in turn is counter-productive in striving to achieve the SDGs and potentially misleading.

In this report, we propose a methodology for assessing and scoring ASC's current direct and indirect contributions towards the SDGs within ASC's sphere of influence. Annexes are included with detailed calculations and materiality assessment and performance notes on where to find the underpinning data and substantiations. We find in this data-rich

report that ASC addresses targets within all of the 17 SDGs, with 82 of the 169 targets (49%) deemed to be in scope by degrees that vary between 16% and 75%. We also find that 80% of the targets are considered to be well or very well addressed, which leaves us with ample room for improvement, and also a roadmap to undertake that improvement.

ASC has a strong and demonstrable contribution to the following SDGs:



The ASC programme also aligns strongly with targets related to:



Globally, ASC addresses targets within all 17 SDGs

In the Key Findings section, we offer different lenses through which to analyse the data, and try to uncover what is more important - the strength with which ASC addresses a particular SDG, defined by an overall rating, or the SDGs to which ASC contributes the most, which is measured by the percentage of SDG targets in a particular SDG with which ASC is in scope.

We have attempted to remain self-critical in our assessment of the current status of ASC's SDG performance, with continual improvement in mind, and far from providing all the answers, we offer a pathway to quality SDG data and a framework within which to progress the discussion. Our intention is to undertake an analysis of our SDG performance on an annual basis and we welcome suggestions that might help to improve our methodology going forward.

Achievement and progress towards the SDGs is not a linear positive journey and shouldn't be taken for granted. The latest (November 2022) UN FAO report, "Tracking progress on food and agriculture-related SDG indicators," highlights how for example, the "triple threat of Covid-19, conflict and climate change" has had a negative impact on delivering on the SDGs, by slowing or reversing progress made to date. This is notable around SDGs 1 and 2 which tackle poverty and hunger reduction; SDG 6, insufficient progress on clean water and sanitation; SDG 5, setbacks re gender equality; SDG 10, reduced inequalities; and SDG 14, exacerbated challenges regarding life below water.

Many of the key actors who play an instrumental role in the future of the aquaculture industry, from producers, civil society, supply chain and retailers, to regulators and the global financial sector, demand high-quality, credible and SDG-aligned sustainability data. The

level of transparency brought by the ASC programme, together with the stringency of its multiple performance requirements, is unparalleled in the realm of aquaculture certification, and means that claims made via ASC certification can be verified. They are reliable, credible, and bring much-needed accountability to the industry, helping to provide a social licence to operate, without which it cannot sustainably grow.

We believe that by providing a tentative methodology to quantify the ASC's SDG performance in this first iteration, we can offer a proxy to ASC certified operations' own SDG performance. This is further supported by the stringency of the ASC sustainability requirements and the strength of accountability, backed up by third-party auditing.

The Chair's Note of another UN report ("Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions") published in November 2022 at the Conference of the Parties (COP27) in Egypt, is titled "It's Time to Draw a Red Line Around Greenwashing." Starting with the words "We are at a critical moment for humanity," it highlights the need to tackle greenwashing in order to focus on the most-pressing sustainability issues, notably via mandatory reporting. ASC makes legal compliance the base requirement in all standards, but goes much further, with a need for a great level of transparency.

As the World Economic Forum (WEF) highlighted "<https://www.weforum.org/press/2022/06/targeted-financing-crucial-for-ocean-health-and-achieving-sdgs-new-report-shows/>" in June: "SDG14 remains the least funded of all 17 global goals, yet achieving it will have significant exponential benefits for people and the planet"... The urgency to deliver on SDG 14 (Life below water) is greater than ever, but is interlinked to progress on all the other SDGs.

We need to prevent greenwashing, provide quality sustainability key performance indicators (KPI) data in the realm of aquaculture, monitor and report transparently on SDG performance to fill existing data gaps, and navigate the complexities of ensuring sustainable and responsible aquaculture for the future.



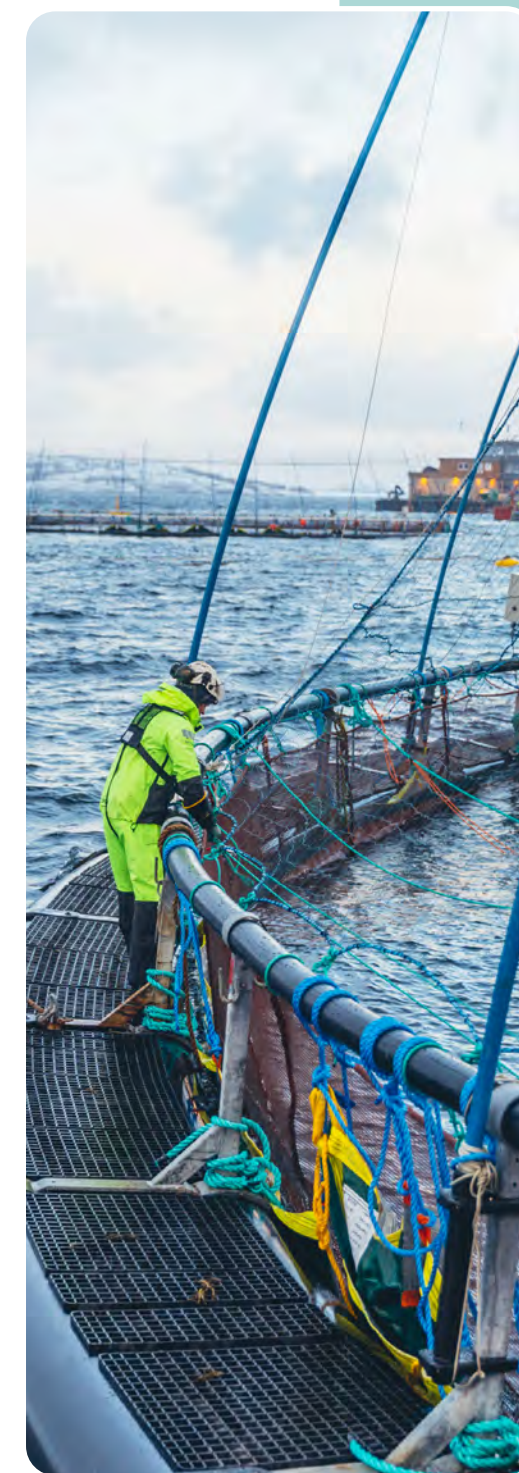
Download Full report (including Methodology & all results)



Annex 1 – How ASC contributes to the SDGs: Materiality Assessment & Contributions Matrix



Annex 2 - How ASC contributes to the SDGs: Gap Analysis



ASC in a nutshell

The Aquaculture Stewardship Council (ASC) is the world's leading certification scheme for farmed seafood – known as aquaculture – and the ASC label only appears on food from farms that have been independently assessed and certified as being environmentally and socially responsible.



Our Vision

A world where aquaculture plays a major role in supplying food and social benefits for humanity whilst minimising negative impacts on the environment.



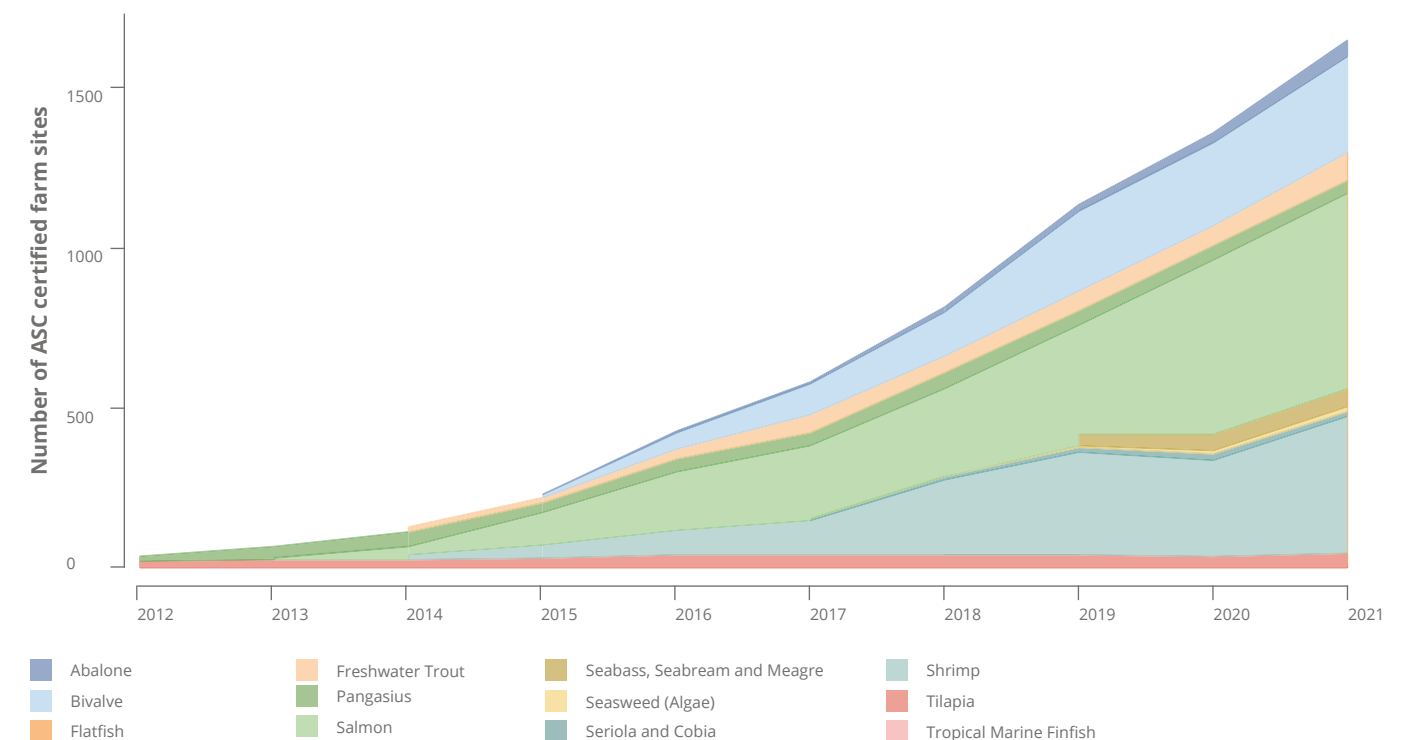
Our Mission

To transform aquaculture towards environmental sustainability and social responsibility using efficient market mechanisms that create value across the chain.

ASC maintains 11 species-specific standards along with the joint ASC-MSC Seaweed Standard defining responsible performance across 17 species groups. Each standard adheres to ASC's core principles, requiring that farms must comply with national laws and local regulations, preserve biodiversity, ecosystems, wild populations, ensure efficient use of resources, effective management of fish health, responsible treatment of employees and engagement with local communities. recently launched the ASC Feed Standard v1.0. Since, the impacts of aquaculture extend beyond the farm, the ASC launched its Feed Standard (effective in January 2023) addressing all major impacts of feed ingredient production and feed chain supply traceability, extending its reach also to the suppliers of ingredients and the production of raw materials.

Below are key figures and illustration excerpted from the ASC's Annual Report 2021 "Transforming Aquaculture" which can be found here: <https://www.asc-aqua.org/what-we-do/how-we-make-a-difference/annual-report/>

A decade of growth for ASC farm certification



In 2021, ASC experienced a 20% growth in the number of certified farm sites from the previous year, increasing the global production of seafood that meets the social and environmental sustainability requirements of ASC standards to over 2.5 million tonnes. Key producing countries contributing to this volume included Norway and Chile (each with

over 800,000 tonnes of salmon), Vietnam (with over 200,000 tonnes of shrimp) and Ecuador (with 120,000 tonnes of shrimp), critical to meet the increasing demand for ASC certified products.

ASC Standards at a Glance in 2021

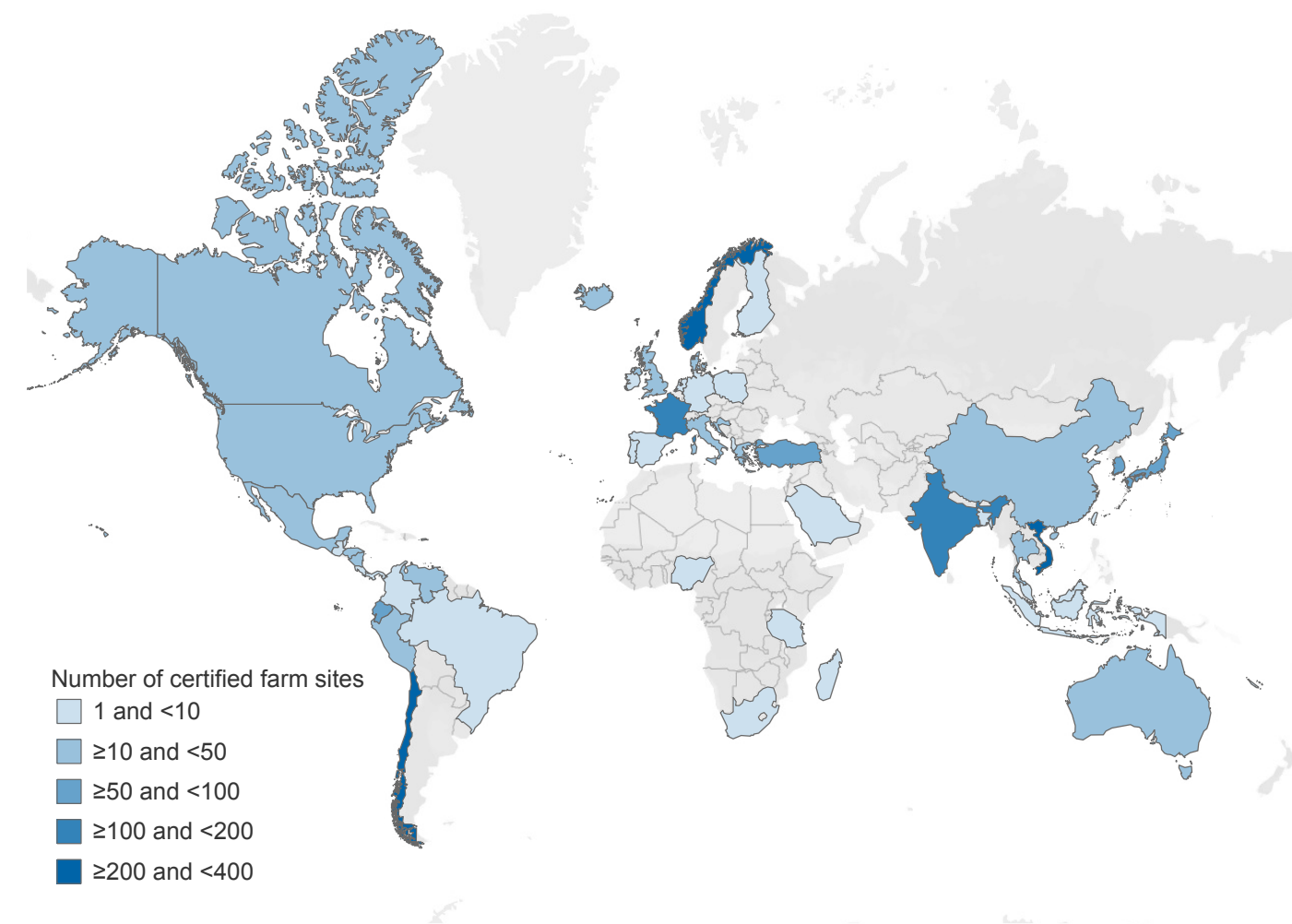
	Units of certification (UoCs)	ASC certified farm sites	ASC certified species	ASC certified tonnes	ASC proportion of global aquaculture production	Farm improvements	ASC certified products available to consumers
Salmon	549	609	6	1,685,570	52.3%	1,416	6,912
Shrimp	211	426	5	274,440	2.8%	907	9,714
Pangasius	34	43	1	115,393	3.9%	116	1,572
Tilapia	28	39	3	222,259	3.6%	55	339
Seabass, Seabream, Meagre	41	56	4	59,074	8.6%	36	518
Tropical Marine Finfish	2	6	4	2,448	0.3%	17	6
Freshwater Trout	58	82	5	47,551	6.1%	184	1,154
Abalone	14	49	4	2,351	1.0%	34	54
Bivalve	44	302	8	166,191	1.0%	56	822
Seaweed and Algae	17	17	8	587	0.0%	NA	NA
Seriola and Cobia	13	18	5	4,471	2.5%	29	228

In 2021, by collaborating with over 230 commercial and non-commercial partners, we have empowered consumers to be confident that their seafood choices are helping to protect fish and the environment for future generations. Global retail markets continued to demonstrate a strong preference for seafood, with salmon and shrimp dominating 70% of ASC labelled product weight, and the demand rising for other

important regional species, such as trout, seabass and seabream. By the end of 2021, the availability of ASC certified products grew by 10% from the previous year, bringing over 21,000 types of ASC labelled products to consumers in 91 markets worldwide, with over 275,000 tonnes of labelled products sold.

ASC farm locations

(as of December 2022)



One can also read the ASC's First Decade (2010-2020) book here: <https://online.fliphtml5.com/vqbm/rgku/#p=1>

Results

Key Findings

How many and which SDGs/SDG targets are within scope?

Half (49%) of the 169 SDG targets can be considered within the scope of the aquaculture industry and thus also the ASC's work. The ASC programme addresses more than 80% of those targets in scope either well or very well. Very well = 40.2%, well = 41.5% and partially = 18.3%.

Overall, targets under all 17 SDGs are being addressed by the ASC, therefore all of the 17 UN SDGs are being addressed by the ASC programme, but to different degrees, varying between 16% and 75% of SDG targets within each goal being addressed.

ASC addresses SDG targets where 95.2% of the UN-defined indicators are located (i.e. targets where 118

of the 124) indicators contained within the 169 targets are nested. Whilst not all SDG indicators are tailored/ applicable within aquaculture's context, this is another measure of how material those particular SDG targets within ASC sphere of influence are globally.

Due to the large volume and ASC SDG performance data (please refer to [Annex 1](#) for full details of materiality, SDG performance calculations, and substantiations for.), we will below provide only the synopsis of ratings per SDG targets. Please go to the 'SDG Summaries' section for more comment and analysis at SDGs [1-17] level.

ASC contributes strongly to the following SDGs:



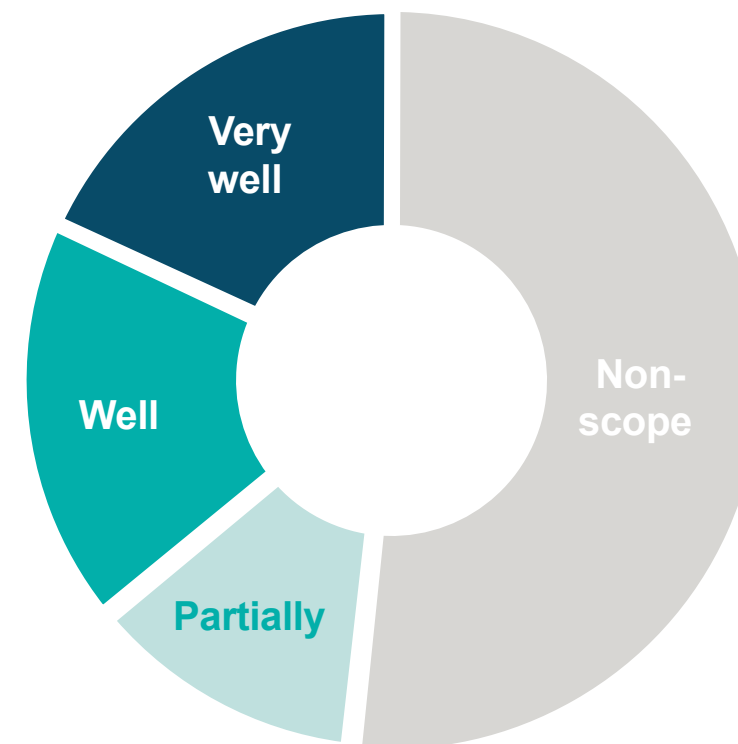
The ASC programme also aligns strongly with targets related to:



Reminder

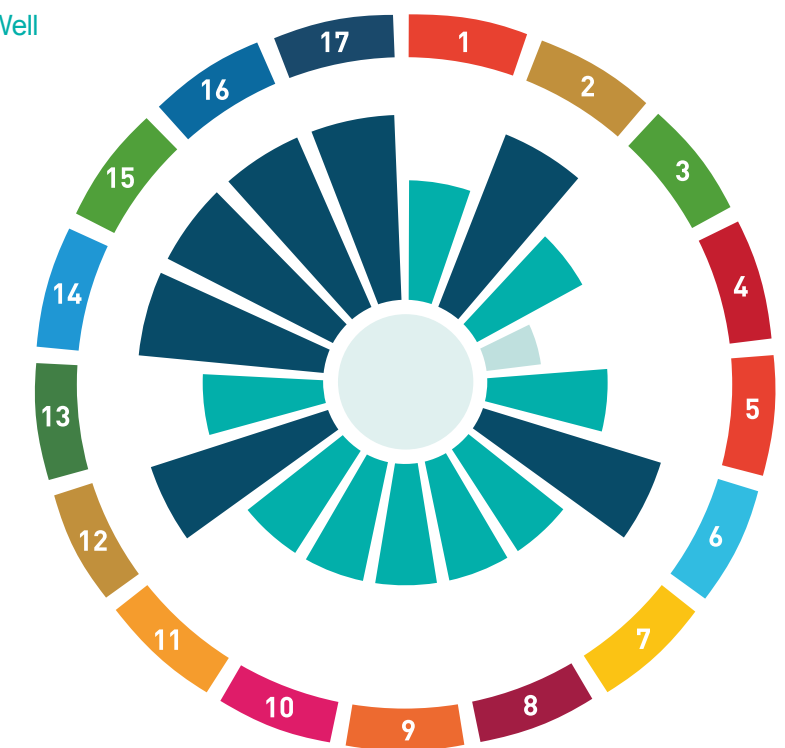
The values/ratings provided, and the colours allocated for each SDG and SDG target in scope, together with the rationales and substantiations on which those values are based, can be found in the "Mapping ASC and SDGs Contributions Matrix" in [Annex 1](#).

ASC's overall contribution to the 169 SDG targets



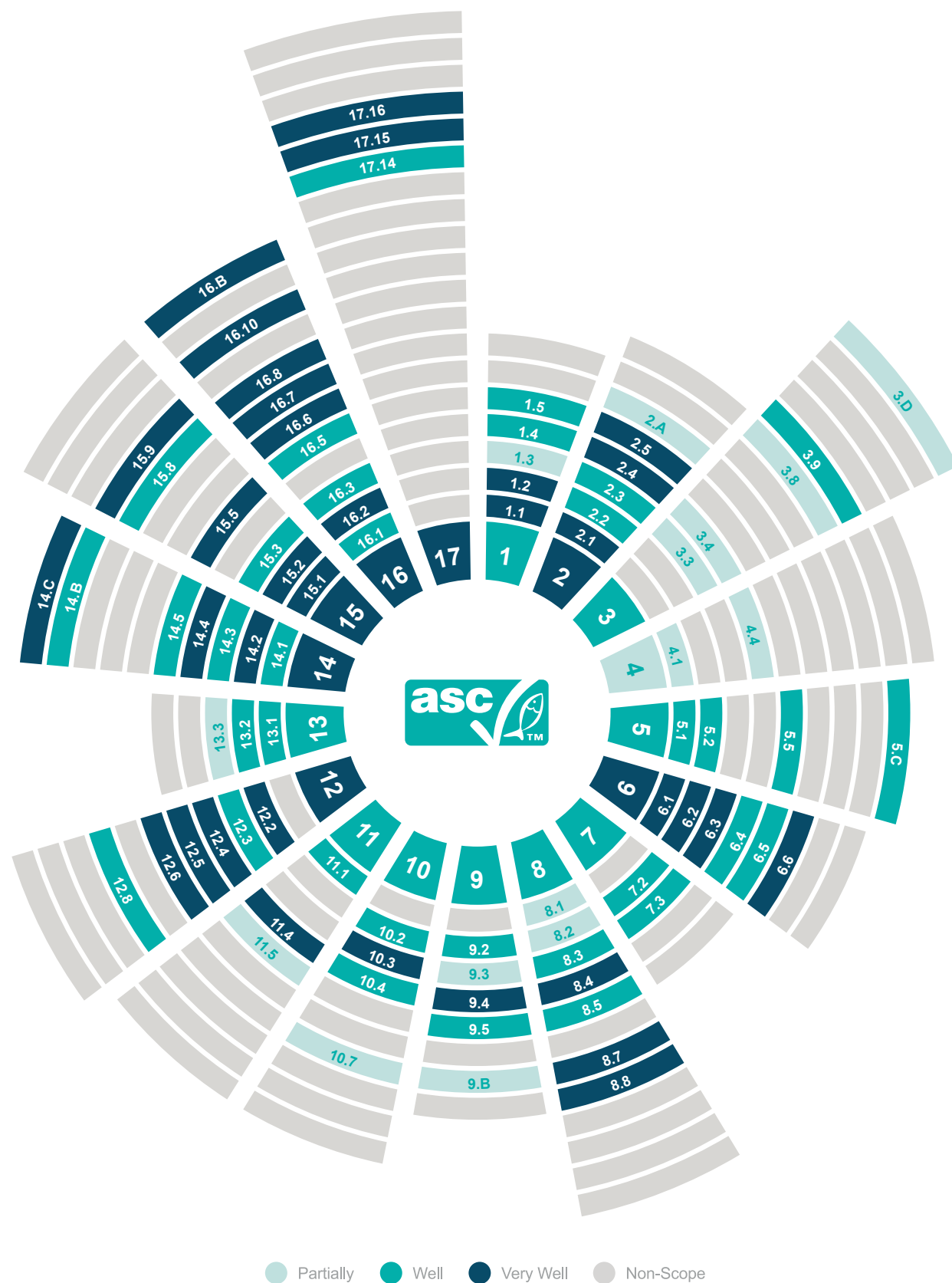
49% of targets in-scope, of which more than 80% are addressed Very well or Well

ASC's average contribution per SDG



ASC addresses all SDGs, but to varying degrees

ASC average contribution per SDG targets within ASC's Sphere of Influence



Ordered by SDG 1-17

	How does the ASC programme address the SDGs? transparently/verifiably, directly and indirectly Mapping quantitatively the Aquaculture Stewardship Council (ASC) programme against the 17 UN SDGs' 169 targets	ASC Overall SDG contribution Values ranging [0-4.5]	ASC Number of targets per SDG	Number of targets total/SDG [ASC]	% of SDG targets "in scope" for ASC, per SDG
SDG 1	End poverty in all its forms everywhere	2.60	5	7	71%
SDG 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	3.00	6	8	75%
SDG 3	Ensure healthy lives and promote well-being for all at all ages	1.60	5	13	38%
SDG 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	1.25	2	10	20%
SDG 5	Achieve gender equality and empower all women and girls	2.00	4	9	44%
SDG 6	Ensure availability and sustainable management of water and sanitation for all	3.2	6	8	75%
SDG 7	Ensure access to affordable, reliable, sustainable and modern energy for all	2.00	2	5	40%
SDG 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	2.79	7	12	58%
SDG 9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	2.10	5	8	63%
SDG 10	Reduce inequality within and among countries	2.50	4	10	40%
SDG 11	Make cities and human settlements inclusive, safe, resilient and sustainable	2.67	3	10	30%
SDG 12	Ensure sustainable consumption and production patterns	3.42	6	11	55%
SDG 13	Take urgent action to combat climate change and its impacts	2.33	3	5	60%
SDG 14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	3.14	7	10	70%
SDG 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	3.50	6	12	50%
SDG 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	3.00	8	12	67%
SDG 17	Strengthen the means of implementation and revitalize the global partnership for sustainable development	3.33	3	19	16%

Gap Analysis

In addition to quantifying ASC's performance against the SDGs and SDG targets, a gap analysis was carried out to compare ASC's SDG performance with that of non-verifiable and non-transparent aquaculture, to ascertain how credible SDG claims made by generic aquaculture operations could be construed. Whilst this exercise lacks granularity considering the wide variety and variability of assumed (global data are sorely lacking) SDG performances within the world of

Aquaculture at regional/country, species, production systems and corporate levels, the general scores point more to the 'potential' of aquaculture to deliver rather than to any verifiable performance.

The analysis thus found that whereas all Aquaculture can contribute significantly to the SDGs, without providing independent and transparent SDG data audits and assurances, organisation/entities and industries cannot credibly demonstrate their positive

contributions towards many specific SDG targets; Furthermore they are likely to underestimate their negative contributions which may in some cases outweigh some of the benefits realised.

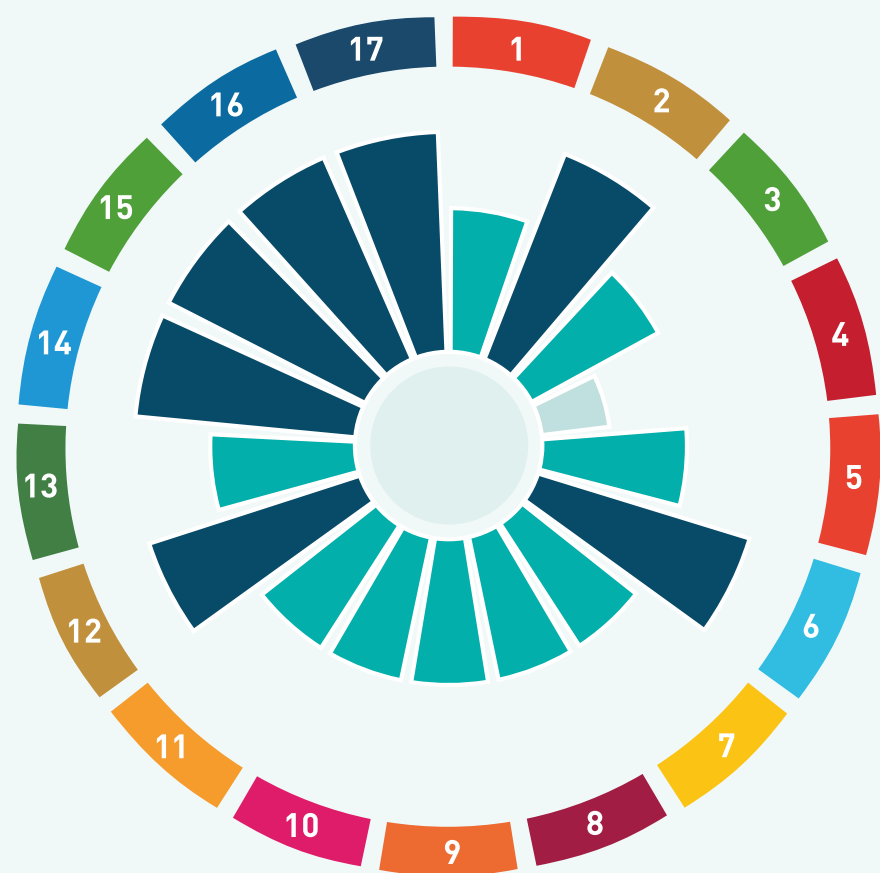
The following graph shows the gaps between non-certified aquaculture production that cannot transparently substantiate its contribution to the SDGs, and the ASC programme, which demonstrably does contribute to SDGs.

The gaps are greatest between ASC and generic non-transparent aquaculture ratings, where ASC arguably brings most value through its third-party assured alignment and direct and indirect addressing of SDGs and SDG targets.

The full comparison of scorings at SDG target level between ASC and non-verifiable/non-transparent claims can be found in [Annex 2](#).

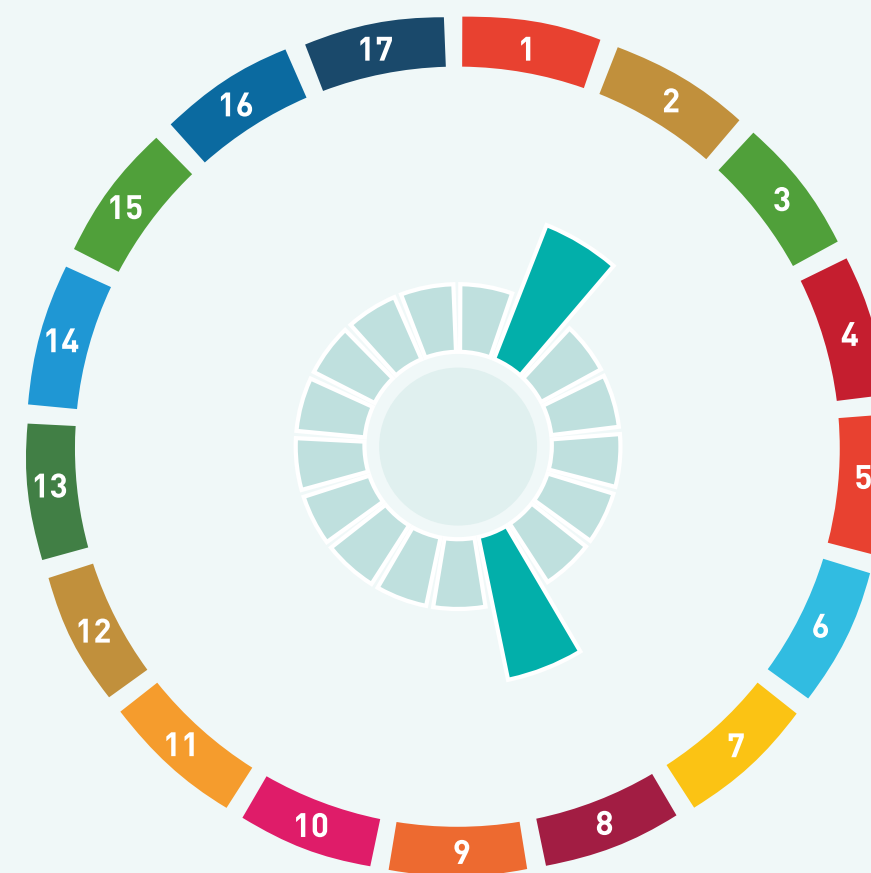
Making credible claims:

Differences in demonstrably contributing to SDGs in aquaculture



ASC verified and transparent SDG performance

● Partially ● Well ● Very Well



Non-verified and non-transparent SDG performance

● Partially ● Well ● Very Well

SDG Summaries

ASC SDG performance - summaries per SDG 1-17



END POVERTY IN ALL ITS FORMS EVERYWHERE



The seven associated targets of SDG 1 aim to eradicate extreme poverty for all people everywhere, reduce at least by half the proportion of men, women and children of all ages living in poverty, implement nationally appropriate social protection systems and measures for all, and by 2030 achieve substantial coverage of the poor and the vulnerable.

How does ASC contribute?

Poorly paid workers can be trapped in a cycle of poverty, which fair pay and good working conditions can offer a route out of. ASC standards include criteria that require farms to have terms of employment. Contribute towards ensuring farms' and feed mills' exhibit social responsibility towards employees and local communities, including decent wages, benefits, transparency in contracts, and freedom from discrimination. Requirements also address access to basic services, land and resources. Responsible farming, fair working conditions and the application of labour rights contribute to a reduction in poverty.

How we contribute to the SDG 1 targets



Target highlights:

ASC scores highly on this SDG, with a direct contribution to the reduction of poverty through the provision of employment with good working conditions, and measures in place to protect and support employees. The operation of a farm also contributes indirectly to this target, with local spend on equipment and supplies, plus visits from auditors and other workers who spend money in the community, all of which help to improve its economy.

ASC requirements on working conditions ensure access to basic services for all employees and those who live on the farms, whilst continuous engagement with communities ensures that their access to land and basic services are protected.

Additionally, ASC's work on mangrove restoration contributes directly to this SDG. Protecting mangroves, wetlands and other natural habitats in coastal regions increases communities' resilience to extreme climatic events. ASC requirements help shrimp farmers to conserve biodiversity while reducing the exposure of local communities to the effects of climate-related events (target 1.5).

Two targets are out of scope for the work of ASC, as they relate to mobilisation of resources and policy frameworks.

How we contribute to the SDG 1 targets

1.1.
By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day

This is a core value underpinning ASC's mission of transforming aquaculture towards social responsibility. All ASC standards contribute towards a reduction in extreme poverty through legal compliance indicators and requirements on the payment of fair and decent wages. Additionally, discrimination in the working environment can negatively affect overall poverty and economic development rates and all ASC standards include requirements aimed at ending discrimination. The upcoming ASC Farm Standard, due to be published in Q2 2024, includes requirements on working towards paying employees a living wage.

1.2.
By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

Compliance with the requirements of ASC standards will help to improve the livelihoods of aquaculture industry workers and their families across the globe.

1.3.
Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable

All ASC standards include extensive requirements for work environment health and safety. The upcoming ASC Farm Standard, and the Seriola and Cobia (6.3.4), Shrimp (4.3.4 and 4.8.7) and Feed (1.10.4) Standards require that maternity - and paternity in the case of Farm and Feed - rights and benefits are respected. All ASC standards include requirements on the provision of insurance for worker injuries and accidents.

The ASC standards also contribute towards ensuring farms' social responsibility towards their employees and local communities through wide ranging requirements covering human rights, labour rights and engagement with communities who may be impacted by the operations of the farm or feed mill.

1.4.
By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

The ASC requirements on the elimination of discrimination contribute to this target. Standards also include extensive requirements around engagement with communities and the prevention of negative impacts on those who live near the farms and feed mills. For example, The Shrimp Standard includes a requirement to conduct a participatory Social Impact Assessment, working with communities to ensure their access to services and control over land. ASC standards including Pangasius (7.15.1 and 7.15.2), Shrimp (3.3.1), Feed (1.15.11) and the Farm Standard, have embedded requirements to favour local employment, goods and services where possible. This allows for equal rights to economic access. All standards also include requirements aimed at ensuring local communities' access to resources. Examples include 'no changes undertaken restricting access to vital community resources without community approval' in Abalone (6.1.1), Salmon and Seriola and Cobia (7.3.1) and Tropical Marine Finfish (7.10.1), "farm does not impede navigation, aquatic animals or water movement" in Bivalves (6.1.5) and Pangasius (2.3.1), and "evidence of assessments of company's impact on access to resources" in Pangasius (7.13.1), Seriola and Cobia (7.3.2) and Shrimp (3.1.1).

ASC certifies **640** farms in low income and lower-middle countries, which provide employment and **fair wages** to thousands of employees

1.5.
By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

Protecting mangroves and other natural habitats in coastal regions increases resilience to extreme climatic events and reduces communities' exposure to them. ASC has various requirements aimed at protecting critical habitats, including wetland and mangroves. See for example ASC's Principle 2 in the Salmon Standard, "Conserve Natural Habitat, Local Biodiversity and Ecosystem Function" and in the Shrimp Standard, "Site Farms in Environmentally Suitable Locations while Conserving Biodiversity and Important Natural Ecosystems," which include criteria/indicators/requirements focusing on water quality, conservation of protected areas or critical habitats, consideration of habitats critical for endangered species and prevention of salinisation of freshwater and soil resources. See Flatfish and Tropical Marine Finfish (2.6.1-2.6.4), Shrimp (2.5.1-2.5.4), Freshwater Trout 2.6.4, Tilapia (3.2.1) etc. All ASC species-specific standards include requirements for "interaction with critical or sensitive habitats and species" and require "Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems" and ban the siting of operations "in mangrove ecosystems and other natural wetlands" or "in a protected area (PA) or High Conservation Value Areas (HCVAs)." See Abalone (2.2.4), Finfish, Seabass Seabream and Meagre, Seriola and Cobia plus Tropical Marine Finfish (2.3.2), Freshwater Trout (2.1.1), Salmon (2.4.2), Shrimp (2.2.1), and Tilapia (2.6.1). Several Standards also specifically ban "siting farms in critical habitats of endangered species as defined by the IUCN Red List, national listing processes or other official lists." (Abalone (2.2.4), Bivalves (2.1.5, 2.3.5), Pangasius 2.2.4) and Tilapia (2.3.1).

Furthermore, under the Pangasius (7.13.1 - 7.13.2) and Shrimp (3.1.1) Standards, further outreach related to the farms' potential impact and benefits of ASC certification, is disseminated in a participatory fashion with local stakeholders. "Farm owners shall commission or undertake a participatory Social Impact Assessment (p-SIA) and disseminate results and outcome openly in locally appropriate language. The p-SIA process and document includes a participatory (shared) impact and risk analysis." There are also relevant requirements related to riparian buffer zones in Freshwater Trout (2.2.1), Shrimp (2.4.2), and corridors, including "Minimum width of permanent native and natural vegetation through farms to provide human or native wildlife movement across agricultural landscapes," in Shrimp (2.4.3). Shrimp (2.4.1) states: "Coastal barriers: Minimum permanent barrier (or natural) between farm and marine environments. Zone of natural vegetation must be 100 metres wide."

Mangrove protection, conservation and restoration are also part of ASC's drive to protect biodiversity and livelihoods dependent upon it, and recognise such important ecosystem functions, which in turn help to build the resilience of the poor and those in vulnerable coastal positions. See Flatfish (2.3.3), Freshwater Trout (2.1.2), Pangasius (2.2.1), Shrimp (2.2.2), Tilapia (2.6.1) and Tropical Marine Finfish (2.3.3). Also relevant are Biodiversity/Environmental Impact Assessments in Salmon (2.4.1), Shrimp (2.1.1), Abalone (2.1.1 - 2.2.4), Bivalves (2.3.1 - 2.4.1) and Tropical Marine Finfish (2.3.10).

See also the contribution from ASC's Mangrove project via Socio Manglar, a conservation incentives programme implemented by Ecuador's government, which oversees the funds from the Coastal Habitat Stewardship Fund. This is a partnership between the ASC, Conservation International and the Ecuadorian government's Ministry of Environment, in which local associations are given regular economic incentives, and access to mangrove areas in return for voluntarily committing to Sustainable Use and Stewardship Agreements to protect and maintain mangrove areas. See <https://www.ASC-aqua.org/news/latest-news/ecuador-mangrove-fund/>.

Additionally, the Pangasius (7.13.1 and 7.13.2) and Shrimp (3.1.1) Standards require further outreach to local stakeholders, disseminating results of the participatory Social Impact Assessment to the community and sharing a risk analysis.



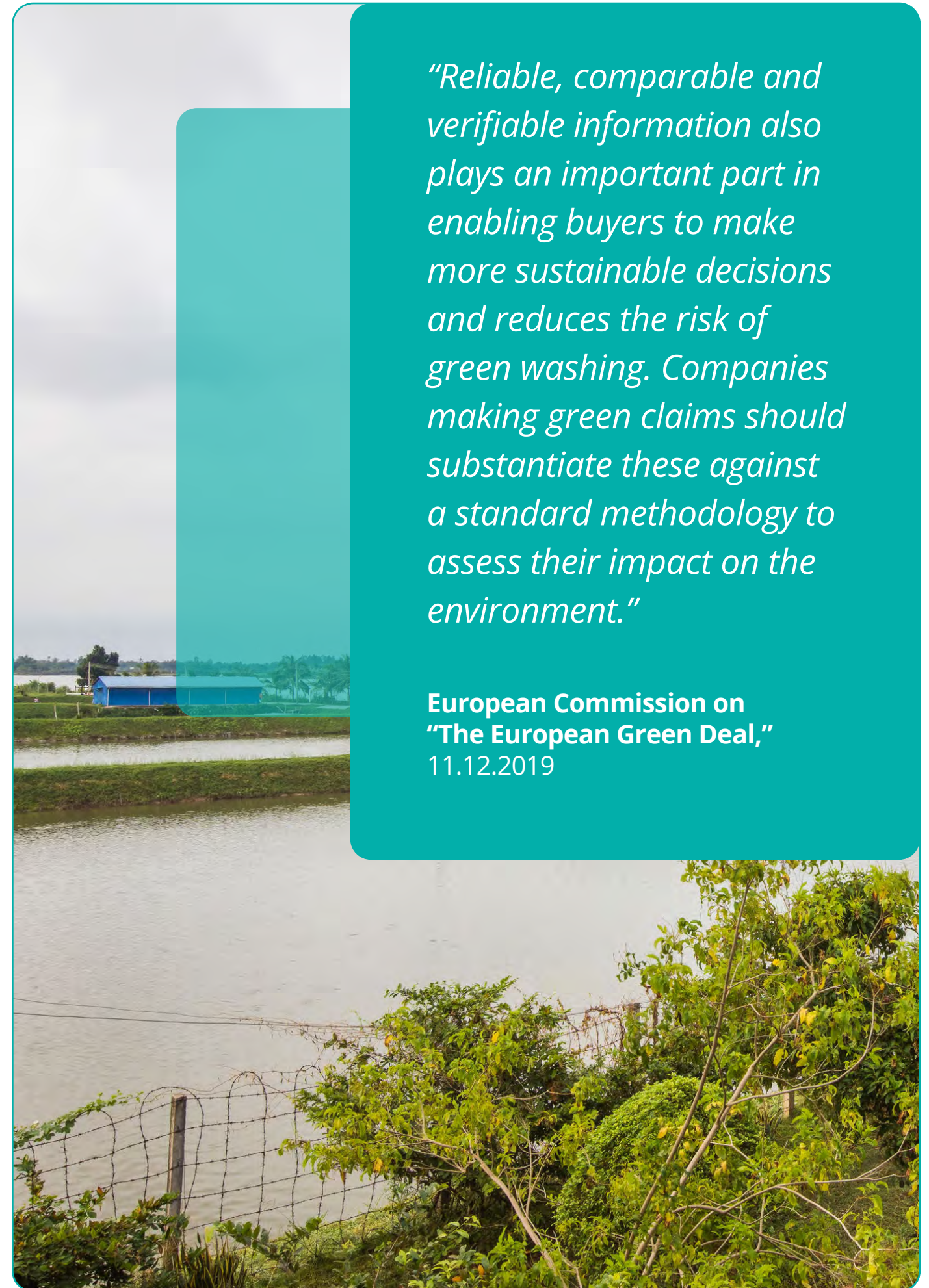
ASC achievement

The creation of employment opportunities is essential for reducing poverty. Sustainable and responsible farming, where employees' rights are respected and their working conditions are good, plays a key role in the eradication of poverty. ASC standards prescribe the creation of responsible employment, where employees are rewarded fairly for their work, and this contributes directly to the achievement of SDG 1.



Looking forward

ASC is a member of the Global Living Wage Coalition and is working with external organisations on a project to develop indicators on living wage for ASC's standards. Participants of the project will work with producers to measure their wages, assess the gap between the prevailing wage and the living wage, and develop a plan to move towards paying employees a living wage, using the Global Living Wage Coalition benchmarks.



“Reliable, comparable and verifiable information also plays an important part in enabling buyers to make more sustainable decisions and reduces the risk of green washing. Companies making green claims should substantiate these against a standard methodology to assess their impact on the environment.”

**European Commission on
“The European Green Deal,”
11.12.2019**

END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE



SDG 2 comprises eight targets, which address ending hunger and malnutrition and ensuring access by all people to safe, nutritious and sufficient food through the whole year. Targets contribute to this goal through sustainable food production, increased agricultural productivity, the maintenance of genetic diversity of seeds, plants and animals, increasing investment in infrastructure, and working on trade and food commodity markets.

How does ASC contribute?

ASC's vision and ethos is one of working towards long-term food security through responsible aquaculture. To achieve this, ASC works with a wide range of large and small scale producers. ASC standards contribute to the sustainable production of food across almost fifty different countries, contributing towards global food security. FAO reports that global consumption of aquatic foods is increasing and in 2019, aquatic foods provided 17% of all animal proteins globally¹. Sustainable aquaculture is essential for food security across the world, and ASC's environmental requirements promote and facilitate it. Indicators are also included in the Standards to ensure that communities have access to the essential resources they need.

How we contribute to the SDG 2 targets

2.1	2A
2.2	2.B
2.3	2.C
2.4	
2.5	

Target highlights:

Two of the targets in SDG 2, which address world agricultural markets and food commodity markets, are out of scope for ASC, but the remaining six targets are areas where ASC is able to make a significant contribution. ASC aims to help transform the industry towards sustainable food production systems (target 2.4), which contributes to global food security. Work on the protection of local biodiversity, water quality, mangroves and other aquatic ecosystems contributes to a resilient seafood production system and increases adaptation and resiliency to climate change. ASC's environmental principles work towards conserving natural habitats, notably by promoting a reduction in the number of fish escapes and by including strict requirements on exotic and non-native species (target 2.5).

How we contribute to the SDG 2 targets

2.1.
By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

While ASC's Standards do not include indicators that directly address ending hunger, ASC's whole programme contributes by defining how aquaculture should perform in order to be responsible, and by certifying the sustainable production of aquatic foods. ASC standards ensure good working conditions and engagement with local communities, ensuring that their access to resources is maintained.

2.2.
By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

As well as ASC's contribution to global food security, certifying farms in low income countries can improve livelihoods in those areas, diminishing the prevalence of undernourishment.

2.3.
By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment

ASC's Improver Programme and Group Certification scheme aim to improve conditions of smallholder aquaculture farmers. These two programmes enable small-scale seafood producers to access ASC certification. Additionally, ASC standards include requirements aimed at ensuring that local communities benefit from a farm's operations through direct employment, mitigation of environmental impacts, and retention of access to resources. There is also a requirement to respect indigenous peoples' rights and access to land and resources.

2.4.
By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

ASC's whole programme works towards sustainable food production systems. ASC's work to protect mangroves and other natural habitats in coastal regions increases communities' resilience to extreme climatic events, by reducing their exposure to such events. As an increasing proportion of the global aquaculture industry meets ASC standards, so will the proportion of aquacultural and agricultural areas under sustainable production increase. Through ASC's Feed Standard, the origin and sustainability of non-marine feed ingredients is addressed. The origin of all marine and non-marine ingredients making up more than 1-2% of feed is carefully monitored. Particular attention is given to plant-based ingredients such as soy or soy-derived ingredients, which should be certified by the Roundtable for Responsible Soy (RTRS) or equivalent, which is the ISEAL members' certification scheme, and addresses environmental and social sustainability. The Feed Standard compounds these requirements and others by requesting that a risk-based due diligence (DD) process take place, in order to prevent/avert deforestation or land-use conversion within the entire ASC certified supply chain. It also assures responsible sourcing from sustainable and resilient agricultural practices/production systems. ASC certified feed mills will be required to have a system ensuring that they can only receive marine-based, plant-based and other feed ingredients that have passed due diligence. See Feed Standard (2.2.5 - 2.2.7).

ASC certified farm sites produce a harvested volume of **2.4 million** tonnes of **seafood** and **seaweed** per year which significantly contributes to global food security

¹ FAO SOFIA 2022

2.5.
By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed

Principles in ASC standards such as Principle 2 in the Salmon Standard, address the conservation of natural habitats and local biodiversity. For example, important requirements are included on exotic and non-native species and on escapes, which have an inherent risk of farmed fish breeding with wild fish. Requirements around the conservation of natural habitats, local biodiversity and ecosystem function are an integral part of all ASC species-standards, as well as the upcoming ASC Farm Standard. This in turn helps protect the local and global genetic diversity of the species farmed and that of their native/wild congeners. For example, both the Salmon and Freshwater Trout Standards require a baseline genetic study for open net pen systems in regions where indigenous salmonids of the same species are being cultivated.

The ASC standards also address benthic biodiversity and water quality near or in the farm, as well as interactions with wildlife, including predators, with many detailed requirements and some stringent performance levels to be attained. Furthermore, the biodiversity dimension is also taken into consideration beyond the farm with due diligence (DD) requirements in the Feed Standard, Annex 3, aimed at preventing the risk of illegal, unreported or unregulated (IUU) fishing products being included in the feed, as well as material originating from species that are IUCN endangered or critically endangered species, or from species in the CITES appendices. When it comes to plant-based feed ingredients, the DD process considers the risk that primary raw material originates from areas subjected to illegal deforestation/conversion. Furthermore, due to biodiversity concerns, all current ASC species-standards use the precautionary principle and ban the production of genetically modified/transgenic species out of "concerns about their unknown impact on wild populations." See Salmon (3.3) and Farm (2.5.5) Standards.

2A
Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries

ASC works in collaboration with other organisations, enhancing aquaculture production across the globe. Notably, ASC's participation in and chair of the Blue Food Partnership brings together different global experts across aquaculture to plan how to increase sustainable aquaculture production. ASC also works closely with other seafood certification and ratings systems, and participates in UN initiatives such as UN Ocean Conference, with the vision of increasing sustainable aquaculture across the globe.

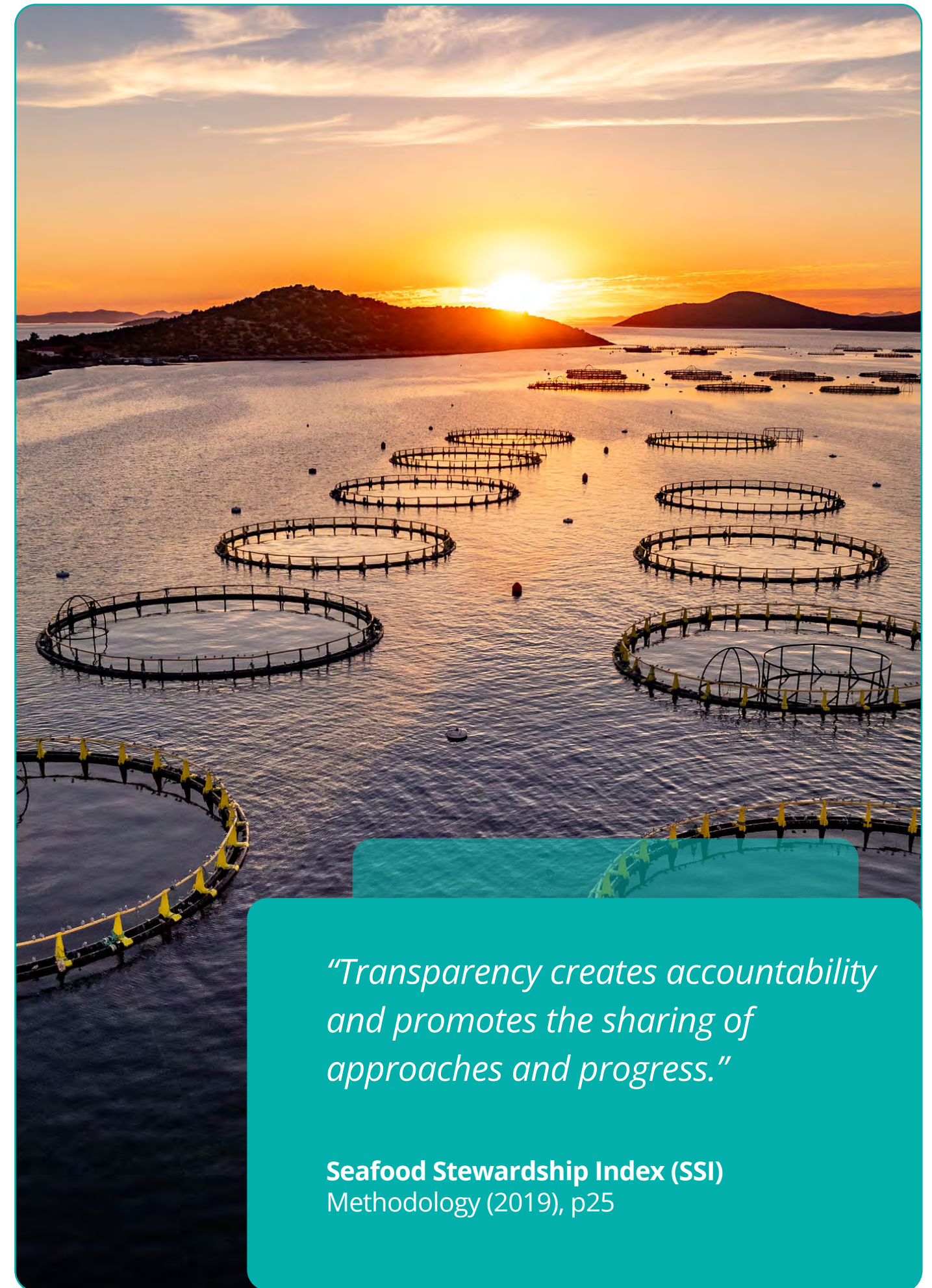


ASC achievement

The FAO SOFIA 2022 report notes that their projects to 2030 "point to an increase in production, consumption and trade... Total production of aquatic animals is expected to reach 202 million tonnes in 2030, with the main increase coming from aquaculture, contributing 106 million tonnes in 2030... In 2030, 90 percent of all aquatic animal production will be for human consumption²." ASC's contribution to the production of aquatic foods for consumption continues to grow and the focus on responsible and sustainable production is essential for global food security. Achieving zero hunger will require

the efforts of governments, private businesses and farmers. Consumers' purchasing decisions have power, and by choosing to buy seafood from farms that display the ASC logo, they can show their preference for farmers who engage in a transparent and evolving process to ensure that the food they produce is raised according to best practices and in a manner that will provide much needed resources for the future.

²FAO SOFIA 2022



"Transparency creates accountability and promotes the sharing of approaches and progress."

Seafood Stewardship Index (SSI)
Methodology (2019), p25

ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES



SDG 3 has thirteen targets that work to ensure healthy lives and promote well-being for everyone, through the reduction of global maternal deaths, infant deaths, under-5 mortality, premature mortality from non-communicable diseases and road traffic accidents, and ending epidemics of communicable diseases. The targets also aim to strengthen access to different kinds of health care and coverage and strengthen research and health financing.

Target highlights:

Most of the targets in this SDG are out of scope for the work of ASC as they address a wide range of healthcare issues. Five targets are in scope and are addressed by several requirements in ASC standards. Access to clean drinking water and good hygiene and sanitation facilities contributes to good health and towards the prevention of water-borne and communicable diseases. All ASC standards also include strict requirements on health and safety, which contribute to the health and wellbeing of employees

ASC standards work towards the protection of human health through indicators in the environmental principles, which set out stringent requirements around water quality and the discharge of waste, working to prevent any kind of pollution, particularly that which can be damaging to human health. Antimicrobial resistance (AMR) caused by the overuse of antibiotics is a serious threat to human health. ASC bans the use of antibiotics listed as critically important for human medicine by the World Health Organisation, while strictly monitoring and limiting others.

How we contribute to the SDG 3 targets

3.1	3.6	3.B.
3.2	3.7	3.C.
3.3	3.8	3.D.
3.4	3.9	
3.5	3.A	

³ Source: ASC blog: <https://www.ASC-aqua.org/what-are-the-benefits-of-omega-3/>

⁴ Source: ASC blog: <https://www.ASC-aqua.org/its-world-heart-day-heres-how-seafood-can-help-you-heart/>

⁵ FAO SOFIA 2022, p.xx

How we contribute to the SDG 3 targets

3.3
By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases

ASC standards require farms and feed mills to provide access to free, clearly labelled potable water for all employees and all of those who live on the farm site, to provide sanitation facilities, and promote good hygiene. These measures contribute to the prevention of water-borne and other communicable diseases.

3.4
By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

As outlined above, access to clean drinking water and hygiene and sanitation facilities reduces the transmission of communicable diseases. In addition, ASC's commitment to good, safe working conditions and human rights contributes to good mental health and well being for employees and their families.

3.8
Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all

ASC standards require that farms and feed mills provide insurance for their employees to cover workplace accidents and injuries. The Feed and Farm Standards in particular have extensive indicators on health and safety in the workplace, which include provision of first aid and access to professional support such as an ambulance. All of these indicators contribute to access to essential healthcare services.

3.9
By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

Requirements on work environment health and safety are part of each ASC standard which help to protect workers from hazardous working conditions.

Many criteria in the Standards are aimed at minimising negative water quality impacts on or near farms and feed mills, and thus contribute positively to the health of the ecosystem and of the humans relying on it. Furthermore, all standards require documents demonstrating compliance with regulations and permits, including those concerning water quality impacts, under the legal principles of the standards.

Additionally, the Standards require a mechanism for the community and stakeholders to present complaints or grievances, giving the opportunity to address any issues with air, water or soil pollution, should these problems arise from a farm or feed mill's operations.

Other indicators also address these issues. For example, the Pangasius Standard (3.5.3) requires "evidence that chemical and medicine waste is not being discharged into the natural environment."

3D
Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

The whole ASC programme works towards the reduction of national and global health risks. Every standards except the Abalone and Bivalves Standards, where it is not applicable, include requirements banning the use of antibiotics listed as critically important for human health by the WHO. These requirements contribute significantly to addressing this SDG, and the challenge of preventing a potential antimicrobial resistance (AMR) crisis.

The proportion of global farmed salmon production **certified by ASC** was **52.3%** in 2021. The health and wellbeing of employees working on ASC certified salmon farms are **protected** through the requirements of the Salmon Standard.

ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL



Most of the ten targets of SDG 4 can be defined at government and corporate level, contributing to ensuring inclusive and equitable quality education and learning opportunities for everyone. The targets address all ages, from early childhood development and care to technical and vocational skills for adults, working on equal access to education opportunities for all.

How does ASC contribute?

Despite most of the targets of this SDG being out of scope for the work of sustainable aquaculture, through the requirements on child labour, working hours of young employees and the priority that ASC standards place on access to schooling, ASC makes a contribution to the achievement of this SDG. All employment presents learning and training opportunities for employees and several indicators across ASC's standards ensure that this training takes place.

How we contribute to the SDG 4 targets

- 4.1
- 4.2
- 4.3
- 4.4
- 4.5
- 4.6
- 4.7
- 4.A
- 4.B
- 4.C

Target highlights:

The two targets of SDG 4 that are in scope for ASC address education and training. Target 4.1 works to ensure that all girls and boys complete free, equitable and quality primary and secondary education. The ASC Feed Standard and the upcoming ASC Farm Standard include many requirements involving the prevention of child labour, including specifying that young workers who are of the age of mandatory education can only conduct light work, which means doing non-hazardous work for a reduced number of hours a day to allow for education, and for rest and play. The Standards include requirements that contribute to target 4.4, providing training for employees.

How we contribute to the SDG 4 targets

4.1
By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes

All ASC standards include strong requirements that prevent child labour, with children only being allowed to work if it does not jeopardise their schooling. Ensuring fair and decent wages for employees helps them to support their families and therefore indirectly encourages parents to send their children to school.

4.4
By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

ASC standards support vocational training and encourage education and training initiatives for all employees. The Salmon Standard requires evidence that the company regularly trains staff in fish husbandry, general farm and fish escape management, and health and safety procedures. The ASC Improver Programme also contributes through capacity building of those employed at farms participating in the programme.

In 2021, ASC certified farms made **2,780 improvements** across **11 Standards**, including **893** on social responsibility

Lack of or limited accountability by the public and private sectors, inadequate law enforcement (where regulations exist), poor planning (causing conflicts over farming sites and leading to disease outbreaks and ecosystem deterioration), and failure to address the negative environmental and public welfare impacts of some aquaculture systems result in a tarnished image and public mistrust of the industry".

UN FAO
SOFIA Report (2022)

ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS



The nine targets of SDG 5 address gender equality and the empowerment of women and girls. The targets aim to end all forms of gender-based discrimination, all forms of violence against women and girls, and all harmful practices towards women and girls. The targets also work towards the full and effective participation of women across all spheres and ensure access to sexual and reproductive health and rights.

How does ASC contribute?

21% of people employed in the primary fisheries and aquaculture sector in 2020 were women, with 50% employed across the entire aquatic value chain⁶. Women's contribution to aquaculture is vital. Gender equality is an issue of fundamental human rights and is a key contributor to progress and development. Non-discrimination is one of the criteria that appears in every ASC Standard and equality of pay, benefits and opportunities is a key part of the ASC requirements. Additionally, ASC standards work towards the provision of a working environment that facilitates the employment of women. Indicators require separate sanitary facilities and accommodation for women and men where appropriate, for maternity and paternity leave and the provision of a suitable area for breastfeeding, with breaks for women to feed their babies. There are also requirements preventing abuse and harassment.

Target highlights:

ASC is well aligned with targets 5.1, 5.2 and 5C. Targets in this SDG out of scope for ASC include those addressing early child marriage, female genital mutilation, land ownership and enabling technology, but gender equality and empowerment are very important areas for ASC to engage with. ASC standards include criteria prohibiting discrimination of any form and for any reason, including discrimination based on gender. The Standards note that a common form of discrimination is against women workers and require evidence of comprehensive and proactive anti-discrimination policies, procedures and practices. All ASC standards have requirements on providing safe and secure working environments, free of violence, and criteria on disciplinary procedures, prohibiting abusive discipline.

How we contribute to the SDG 5 targets

<u>5.1</u>	5.4	5.A
<u>5.2</u>	<u>5.5</u>	5.B
5.3	5.6	<u>5.C</u>

How we contribute to the SDG 5 targets

5.1
End all forms of discrimination against all women and girls everywhere

All ASC standards include requirements on non-discrimination, for example Salmon (6.4) and Shrimp (4.3). These indicators require, among other things, equality of pay, benefits and promotion opportunities for all workers. Notably for this SDG target, the ASC highlights in several of its standards that "Discrimination occurs in many work environments and takes many forms. A common form is discrimination against women workers."

Some standards, for example, Seriola and Cobia (6.3.4) and Shrimp (4.3.4, 4.8.7) include an indicator requiring zero incidents where employers dismiss a worker on the basis of marital status or pregnancy, or deny employees legal rights to pregnancy, or where maternity rights and benefits are not respected.

5.2
Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation

Every ASC Standard prevents forced, bonded or compulsory labour and human trafficking, for example, Salmon (6.3) and Shrimp (4.2). The Feed Standard and upcoming Farm Standard also include requirements preventing violence, abuse and harassment in any form, including mental, emotional, physical and sexual abuse. Salmon (6.9), Shrimp (4.7) and several other Standards mandate that disciplinary practices must respect the dignity of the employee and not involve any form of abuse or violence.

5.5
Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

As outlined above, the requirements in the Standards on non-discrimination, contribute to this target. Additionally, indicators for the grievance committees in the Feed and Farm Standards require that committees must be representative of the communities in which they operate.

5C
Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels

ASC contributes to this SDG target via the growth and advocacy of its whole programme, including the Improver Programme (IP), as well as through the social criteria/requirements including non-discrimination, and by championing responsible aquaculture and its adoption at country/regional level around the globe.

All ASC standards include requirements on non-discrimination, for example Salmon (6.4) and Shrimp (4.3). These indicators require, among other things, equality of pay, benefits and promotion opportunities for all workers. Notably for this SDG target, the ASC highlights in several of its standards that "Discrimination occurs in many work environments and takes many forms. A common form is discrimination against women workers."

Some standards, for example, Seriola and Cobia (6.3.4), and Shrimp (4.3.4, 4.8.7) include an indicator requiring zero incidents where employers dismiss a worker on the basis of marital status or pregnancy, or deny employees legal rights to pregnancy, or where maternity rights and benefits are not respected.

ASC sponsors the HATCH initiative, 'Women in Ocean Food Innovation Studio', and also of WSI, the international organisation for women in the seafood industry.

ASC aquaculture standards are based on clear, **scientifically derived** and **metric based performance indicators**.

⁶ FAO SOFIA 2022, p.xx

ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL



SDG 6 addresses the availability and sustainable management of water and sanitation for all. There are eight targets in this SDG, working towards access to safe drinking water and adequate sanitation and hygiene for everyone. Several targets focus on the improvement of water quality and water-use efficiency and management, as well as the protection of water-related ecosystems.

How does ASC contribute?

Many parts of ASC's programme contribute to this SDG. ASC standards include requirements to ensure that farm and feed mill employees and their families who live on site have access to safe drinking water, sanitation and hygiene facilities, plus clean, sanitary living conditions. ASC certified farms and feed mills must also minimise the impact of their activities on surrounding water ecosystems. ASC standards require monitoring of water quality, treatment of effluent water, mitigation of nutrient pollution in water, and responsible disposal of waste, promoting good water quality and the responsible and efficient use of water.

How we contribute to the SDG 6 targets



Target highlights:

ASC scores highly on this SDG, in part because both the environmental and social aspects of ASC's programme directly contribute to the achievement of these targets. Two targets are out of scope and these address international cooperation and the participation of local communities in water and sanitation management. Four out of the six targets in scope are rated green for ASC. ASC's social requirements on the provision of access to drinking water and sanitation and hygiene contribute to targets 6.1 and 6.2 respectively. ASC works to improve water quality (target 6.3) through its Standards. The use of resources in an environmentally efficient and responsible manner, proper waste disposal, and a focus on water quality and nutrient release are critical criteria and key indicators in the ASC standards. All ASC standards are specifically designed to certify responsible aquaculture, which effectively and transparently protects and restores water-related ecosystems (target 6.6). Requirements are aimed at protecting critical habitats, including wetlands and mangroves, and critically endangered species. The siting of farms in mangrove ecosystems, natural wetlands or areas of ecological importance is not allowed.

How we contribute to the SDG 6 targets

6.1
By 2030, achieve universal and equitable access to safe and affordable drinking water for all

ASC standards require the provision of potable water for all employees and those who live on farm or feed mill sites, for example, Shrimp (4.11.1), Flatfish, Seabass, Seabream and Meagre, Seriola and Cobia and Tropical Marine Finfish (6.11.1), and Feed (1.7.10). The Standards also ensure that employees on farms and feed mill sites have access to clean, sanitary and safe living conditions. In addition, all ASC standards require documents demonstrating compliance with regulations and permits concerning water quality impacts, under the legal principles of the Standards. The Standards, for example Pangasius (3.5.1) require evidence that farms' solid wastes are not being discharged into the natural environment, thereby preventing the contamination of drinking water.

6.2
By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

There are requirements in the Standards, for example Shrimp (4.11.2), Finfish, Seabass, Seabream and Meagre, Seriola and Cobia and Tropical Marine Finfish (6.11.1 and 6.11.2), Feed (1.7.9), which ensure that employees and all those who live on the farm or feed mill sites, have access to clean sanitary facilities, separated by gender if required, with adequate privacy.

6.3
By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

All ASC standards require that resources are used in an environmentally responsible manner and many criteria contribute towards this SDG target. See Salmon (4.5) and Shrimp (7.7) which address waste disposal, Salmon (2.2) addresses water quality, and Salmon (2.3) focuses on nutrient release. Most ASC standards include requirements for the presence of a functioning policy for proper and responsible treatment of non-biological waste from production, demonstration that a farmer is aware of recycling facilities that are accessible to the farm and evidence that these facilities are used, compliance with local and national regulations on water use and discharge, possession of permits relating to water quality, safe storage and handling/disposal of chemicals and hazardous materials, presence of a spill prevention and response plan for chemicals and hydrocarbons, evidence that sludge is not discharged directly into receiving waters or natural ecosystems, evidence of proper disposal of chemical, medicines and biological wastes and that they are not discharged into the natural environment, and no allowance for discharging saline waters in natural freshwater bodies. See Finfish (2.6.3), Shrimp (2.5.1), and Tropical Marine Finfish (2.6.3). In addition, Freshwater Trout (3.2.5 and 3.3.3) require that a water-quality monitoring matrix is completed and submitted to ASC. Salmon (4.7.1) requires that where copper-treated nets are used, they are not cleaned or treated in situ in the marine environment. The Standards also include requirements on biological oxygen demand, dissolved oxygen, nitrogen, phosphates, turbidity and chlorophyll concentration.

6.4
By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

Principle 2 of the Salmon Standard aims to "Conserve Natural Habitat, Local Biodiversity and Ecosystem Function" and Principle 2 of the Shrimp Standard aims to "Site Farm in Environmentally Suitable Locations while Conserving Biodiversity and Important Natural Ecosystems." Conscious of the importance of water as a precious and increasingly scarce resource in some regions, ASC has requirements embedded in its Standards that highlight the importance of conserving freshwater resources, including Shrimp (2.5.2) which bans the use of fresh groundwater in ponds, Freshwater Trout (3.1.1) which sets "maximum amount of water that a farm can divert from a natural flowing water body," Freshwater Trout and Pangasius (3.1.3, 2.4.1) require that "Farm complies with water allocation limits set by local authorities or where this is not available, by a reputable independent institution" and Pangasius (2.4.2) sets a limit also for "Maximum amount of water used per tonne of fish produced" to "5,000 m³/metric ton of fish produced." Several ASC standards require that the water used is measured, for example, Abalone (5.5.1), and the intent in future revisions is to set improvement goals.

6.5
By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

There are water resources management measures and requirements in place in various ASC standards, covering access to resources, ensuring site connectivity, water quality and usage, extraction/salinisation monitoring and mitigation. Linking biodiversity/animal health and biosecurity dimensions to the water area, the Salmon Standard for example, also make a requirement for the farms to participate in an Area-Based Management scheme, see Salmon (3.1.1). ASC's RAS Module also attempts to minimise the negative effects of land-based aquaculture on water resources by setting strict water abstraction level requirements in Criterion 1.1 and setting performance levels related to the water quality of effluents and receiving water bodies in Criterion 1.2.

6.6
By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

All ASC standards are specifically designed to certify responsible aquaculture, and effectively and transparently protect and restore all neighbouring aquatic and non-aquatic environments, plus the ecosystems, biodiversity and environments from which feed ingredients are sourced. The Standards have requirements on marine and terrestrial feed ingredients, which have been extensively developed in the ASC Feed Standard. One of many examples of ASC's requirements that protect water-related ecosystems, is aimed at critical habitats, including wetland and mangroves, plus critically endangered and red-listed species. Mangrove protection, conservation and restoration are part of ASC's drive to protect biodiversity and the livelihoods dependent upon it, and recognise such important ecosystem functions, which in turn help build the resilience of the poor and those in vulnerable coastal positions. Finfish (2.3.3), Freshwater Trout (2.1.2), Pangasius (2.2), Shrimp (2.2.2), Tilapia (2.6.1) and Tropical Marine Finfish (2.3.3) are examples of these requirements.

ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL



SDG 7 comprises five targets that address the importance of access to affordable, reliable, sustainable and modern energy for everyone, through increasing the share of renewable energy, improving energy efficiency, the development of research and technology and the expansion of infrastructure.

How does ASC contribute?

One of the FAO's five principles of sustainable food and agriculture states that "sustainability requires direct action to conserve, protect and enhance natural resources" (FAO, 2017, Landscapes for life: approaches to landscape management for sustainable food and agriculture). Access to affordable, reliable and sustainable energy is and will continue to be of vital importance in sustainable development across the world. Although some of the targets of this SDG remain out of scope of ASC's work, criteria that address the efficient use of resources and increased use of renewable energy, contribute here. ASC standards also include requirements on the planning and reporting of energy use, looking ahead to the potential of improved management in this area.

Target highlights:

Three of the targets of SDG 7 are out of scope for ASC, as they focus on universal access to energy services, international cooperation and infrastructure and technology development. However, ASC contributes to the targets in this SDG that address renewable energy, target 7.2 and energy efficiency, target 7.3. ASC standards require the presence of an energy use assessment verifying the energy consumption on the farm on a yearly basis. For some species, ASC also requires farms to integrate energy use assessments and greenhouse gas emissions (GHGe) accounting into their policies and procedures, and to provide documentation on the GHGe of the feed used.

How we contribute to the SDG 7 targets



How we contribute to the SDG 7 targets

7.2
By 2030, increase substantially the share of renewable energy in the global energy mix

The ASC programme strongly contributes to this target. The upcoming ASC Farm Standard requires a site-specific energy and greenhouse gas management plan, and the increase of renewable energies, which will bring ASC into direct alignment with this target. The Feed Standard (1.12.3) requires an Energy Efficiency Management Plan, with the aim of improving energy efficiency and increasing the proportion of energy coming from renewable energy sources.

The ASC understands that education and awareness play a key part in combatting and addressing the climate change challenges. It therefore requires all certified farms to take a monitor and measure approach as a first step to providing data to build understanding about their various impacts. This includes energy use and greenhouse gas (GHG) emissions. All ASC standards excepted Seriola and Cobia Standard require the "Presence of an energy use assessment verifying the energy consumption on the farm and representing the whole life cycle at sea." See ASC 's 'beyond certification advocacy' and work towards awareness of climate change mitigation via adoption by industry of the [ASC's GHG Calculator Tool](#).

Bivalve (5.2.1), Flatfish (4.6.4), Seabass, Seabream and Meagre (4.6.4) and Tropical Marine Finfish (4.6.4) include a requirement to provide "Evidence of a documented strategy to reduce GHG per unit of production (measured in kilojoule/mt of change in fish biomass.)"

The draft Farm Standard Criterion 2.11, "Energy Use and Greenhouse Gas Emissions" will broaden the requirement for energy and GHGe monitoring to all species and see the introduction of an Energy Efficiency Management Plan (EEMP). The requirements in the EEMP are intended to demonstrate that producers with higher rates of energy use and/or energy related GHG emissions are taking real steps to identify ways to improve efficiency and lower emissions. Criterion 2.11 will also see the establishment of on-farm energy use thresholds, to trigger the EEMP process. In addition, under 2.11.3: [...] c) "the unit of certification (UoC) (farm) shall, as part of the EEMP, outline provisions to reduce the use of energy from non-renewable sources, in order to work towards 2.11.3 a) and d)." Also, "The UoC shall, as part of the EEMP, outline provisions to derive an increased proportion of energy from non-fossil fuel sources, in order to work towards 2.11.3 a)."

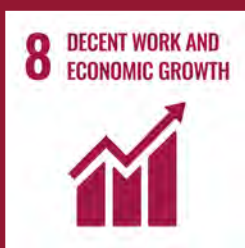
There is also a requirement for Feed: "Documentation of GHG emissions of the feed used during the previous production cycle," in Finfish, Salmon, Seabass, Seabream and Meagre, and Tropical Marine Finfish (4.6.3), and in Feed (1.21), "the UoC uses energy responsibly and monitors Greenhouse Gas (GHG) emissions."

ASC also actively participates at EU level in LCA/Product Environmental Footprint (PEF) - Marine Fish scientific debate and definitions - which include climate change measures.

7.3
By 2030, double the global rate of improvement in energy efficiency

ASC standards, for example Salmon (4.6) and Shrimp (7.6) work towards energy efficiency. Feed (1.12.3) also requires an Energy Efficiency Management Plan, with the aim of improving energy efficiency and increasing the proportion of energy coming from renewable energy sources. Additionally, ASC is actively working on this topic, and will include indicators in the upcoming Farm Standard, including work on energy and greenhouse gas emissions. All ASC standards except Seriola and Cobia require the "Presence of an energy use assessment verifying the energy consumption on the farm and representing the whole life cycle at sea." ASC encourages companies to integrate energy use assessments and GHG accounting into their policies and procedures and recognises the importance of efficient and sustainable energy use. Salmon (4.6) says: "Energy consumption and greenhouse gas emissions on farms. (...) Therefore, these indicators will require that energy consumption in the production of fish should be monitored on a continual basis and that growers should develop means to improve efficiency and reduce consumption of energy sources, particularly those that are limited or carbon-based."

PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL



The twelve targets of SDG 8 address decent work and economic growth through work on increasing economic productivity, the promotion of development-oriented policies, and working towards full and productive employment and decent work for everyone. In addition, there are targets protecting labour rights, and eradicating forced labour, slavery, human trafficking and child labour.

How does ASC contribute?

All ASC standards contribute in multiple ways to the achievement of this SDG. The effective abolition of child labour and the elimination of all forms of forced or compulsory labour are core principles of the ILO “Declaration on Fundamental Principles and Rights at Work.” All ASC Standards prohibit the use of forced, bonded or compulsory labour, human trafficking and child labour, promoting human rights in the workplace and decent work for everyone. The Standards include requirements on freedom of association, the right to collective bargaining, and fair wages and terms of employment for all employees. Standards such as ASC’s, which address working conditions, contribute to fair employment and decent work for all.

Target highlights:

One of the key parts of ASC standards is good working conditions and the importance of creating a decent work environment for all employees of certified farms and feed mills. Through criteria on working conditions, ASC contributes strongly to targets 8.7 and 8.8, which address human rights, labour rights and work environments. In particular ASC’s Standards contain stringent criteria prohibiting the use of forced, bonded or compulsory labour, and child labour, which is aligned with target 8.7. Additionally, all ASC standards are by design aimed at improving global marine and terrestrial feed ingredient resource efficiency in consumption and production. Throughout its Standards, ASC is working to halt environmental degradation and contribute towards sustainable economic growth, as per target 8.4.

How we contribute to the SDG 8 targets

8.1	8.7
8.2	8.8
8.3	8.9
8.4	8.10
8.5	8.A
8.6	8.B

How we contribute to the SDG 8 targets

8.1
Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries

ASC contributes to the economy, as the whole ASC programme is designed to help deliver social responsibility and environmental sustainability, which are closely intertwined with a farm or feed mill’s viability and economic sustainability. Furthermore, ASC’s mission of “transforming aquaculture towards environmental sustainability and social responsibility using efficient market mechanisms that create value across the chain” helps create various ‘values’ across the seafood chain, some of which translate into economic/employment/ GDP growth terms. Revision of the ASC Shrimp Standard in 2022 adds four new genera of freshwater species, which means that 99% of globally farmed shrimp are now covered by the scope of the Standard. The four new genera are Cherax, Procambarus, Astacus and Macrobrachium. The revision spreads the potential positive impact of ASC by enabling more farmers to apply for certification, which requires both environmental and social responsibility.

8.2
Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

As outlined for target 8.1, ASC’s mission and values that certification emphasises for farms and feed mills, can contribute to their economic viability.

8.3
Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

ASC’s Improver Programme and Group Certification methodology contribute strongly to this target, focusing on supporting small scale farms to become certified and encouraging entrepreneurship and development, as well as collaboration between farms.

8.4
Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead

ASC’s whole programme works towards sustainable production and consumption. All the ASC standards are, by design, aimed at improving global marine and terrestrial feed ingredient resource efficiency in consumption and production.

Developed countries are the ‘consumption engines’ that drive the effectiveness of ASC’s goal to transform the industry via its theory of change. For instance, 50% of ASC labelled product volumes are consumed in the Netherlands, Germany and France. The ASC among others, works towards the “promotion and recognition of responsible farming practices through the use of a consumer facing logo that influences consumer choice” and “Collaboration to increase demand and market access for certified seafood via consumer purchasing preference.” (<https://www.ASC-aqua.org/what-we-do/our-approach/our-approach/>). Together with the ASC standards’ requirements and its programme assurance, ASC’s work is particularly well aligned with delivering on SDG 8.4.

ASC contributes both directly and indirectly, by promoting responsible farmed seafood consumption and educating public and stakeholders via consumer campaigns in various countries. The campaigns include a semaine de la peche responsable in France, with similar in Germany, Netherlands, Australia and the UK. A great deal of advocacy work is undertaken by the ASC Outreach/Market Development Teams (MDT), which results in greater consumer awareness and sustainability consciousness.

8.5
By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

All ASC standards include requirements on non-discrimination, for example, Salmon (6.4) and Shrimp (4.3), which contribute to this target of employment and decent for work all. There are also many requirements that contribute towards decent work, including criteria on wages in Salmon (6.6) and Shrimp (4.5) for example, and transparency in contracts and employment opportunities in Shrimp (3.3) The "Equality of pay, benefits and promotion opportunities for all workers" requirement is embedded in all ASC standards.

ASC is currently developing a project on Workers' Voice and Grievance Mechanisms, which further strengthens their commitment to SDG 8.

8.7
Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms

All ASC standards prohibit forced, bonded and compulsory labour, for example in Salmon (6.3) and Shrimp (4.2), and human trafficking and child labour in Salmon (6.2) and Shrimp (4.1), contributing directly to this SDG. All ASC standards aim to protect the human rights of all workers. Additionally, by advocating and creating awareness in partners and retailers, ASC indirectly contributes to making them aware that these issues need addressing.

8.8
Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

ASC standards include extensive requirements that promote labour rights and safe working environments. There are criteria on freedom of association and collective bargaining in for example Salmon (6.1) and Shrimp (4.6), forced labour in Salmon (6.3) and Shrimp (4.2), workplace health and safety in Salmon (6.5) and Shrimp (4.4), wages in Salmon (6.6) and Shrimp (4.5), transparent labour contracts in Salmon (6.7) and Shrimp (4.9), conflict resolution, discipline and harassment in Salmon (6.8-6.9) and Shrimp (4.7), working hours in Salmon (6.10) and Shrimp (4.8), fair and transparent worker management systems in Shrimp (4.10) and living conditions for employees in Shrimp (4.11), among others.

Regular review of ASC standards ensures the certification programme remains **relevant and effective** and able to contribute towards **economic growth** and **decent employment**.



BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION



SDG 9 aims to encourage the development of innovation, resilient infrastructure and inclusive and sustainable industrialisation. There are eight targets in this SDG which work towards this goal, through increasing access of small-scale enterprises to financial services, upgrading infrastructure and enhancing scientific research and technology development.

How does ASC contribute?

ASC's Improver Programme is designed to help small-scale farmers access the ASC certification programme and associated benefits. Assisting small-scale farmers in this way increases their access to industry and financial services. Additionally, several ASC standards include requirements to use resources in an environmentally efficient and responsible manner, thereby contributing to this SDG, particularly through new requirements around measuring energy use and greenhouse gas emissions.

How we contribute to the SDG 9 targets

- 9.1
- 9.2
- 9.3
- 9.4
- 9.5
- 9.A
- 9.B
- 9.C

Target highlights:

The three targets out of scope for ASC in this SDG address infrastructure and technology, and although this may not seem like a natural SDG for ASC to contribute to, ASC's commitment to innovation makes a significant contribution. ASC's new Group Certification methodology helps small scale producers apply for ASC certification, and the Improver Programme (IP) is also designed to help small-scale farmers improve and potentially access the ASC Certification programme and its benefits. The IP is directly aimed at integrating small-scale farmers into sustainable seafood value chains and markets. This is a direct contribution to target 9.3, which addresses access of small-scale industries to value chains and markets.

All ASC standards have in-built resource use efficiency requirements at their core. The ASC mission is to transform the industry in that regard. Criteria include requiring evidence of a documented strategy to reduce greenhouse gas per unit of production, and documentation of greenhouse gas emissions from feed, thereby contributing directly to target 9.4.

How we contribute to the SDG 9 targets

9.2
Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries

ASC's whole programme focuses on the promotion of sustainable and responsible aquaculture, directly contributing to this target.

9.3
Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets

ASC's Improver Programme is designed to help small-scale farmers access ASC certification and the ASC programme, and avail of its benefits. One of the objectives of the ASC-IP is "To engage and enable local governments and initiatives to contribute to and participate in the development of supporting networks to deliver efficient approaches for improvement." This is directly aimed at integrating small-scale farmers into sustainable and responsible seafood "value chains and markets." This can translate into small-scale farmers not only benefitting from the ASC co-benefits such as "Better farming practices can also drive efficiencies and lower costs," but also receiving financial assistance in order to do so.

ASC's Group Certification can also contribute to this target. It is aimed particularly at small-scale farmers and the uptake of this certification could result in more small-scale industries in some regions.

9.4
By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

All ASC standards have in-built "resource use efficiency" requirements at their core, for example, Principle 4 of Salmon and Principle 7 of Shrimp, and ASC's mission is to transform the industry in that regard. Specific metric-based requirements include, but are not limited to, a strategy to reduce GHG per unit of production in Finfish, Seabass, Seabream and Meagre, and Tropical Marine Finfish (4.6.4) and the documentation of GHG emissions of feed used during the production cycle in Finfish, Seabass, Seabream and Meagre, and Tropical Marine Finfish (4.6.3).

The Feed Standard ensures that feed mills handle waste responsibly and "develop and implement a documented Waste Management Plan to improve waste avoidance and resource recovery where possible. The plan shall include the identification of responsible practices and measures, to move away from bad practices and increase responsible practices within a meaningful timeline," Feed (1.19.2). "The Waste Management Plan must be reviewed at least annually," Feed Standard (1.19.6). Equally, there must be an Effluent Management Plan "to reduce negative impacts on receiving waters in terms of ecosystems and human health," Feed (1.20.2). These are just a few examples and there are many other requirements leading to "resource-use efficiency and clean and environmentally sound technologies and processes," which must also be considered for improvement on an annual basis.

9.5
Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

ASC regularly engages and collaborates with scientists and seeks collaboration with certified farms to obtain transparent farm data, which enables researchers to carry out studies. Several ASC standards, including Salmon, Shrimp and Seabass, Seabream and Meagre, include a requirement for "A demonstrated commitment to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks."

ASC's 2019 white paper on Marine Litter and Aquaculture Gear identifies that extreme weather is currently one of the major causes of plastic 'ghost gear' from fish farms entering oceans and rivers and warns that increasingly unpredictable weather caused by climate change could exacerbate the problem. The document is the first to classify the different causes of plastic waste from aquaculture and to assess the risks associated with different farming systems. It also makes recommendations for the aquaculture industry, which can be summarised using the five Rs: Reduce, Re-use, Recycle, Recover, Refuse.

9.B
Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities

As outlined above, ASC's commitment to transparency and to collaboration with scientists and others across the industry, contributes to this SDG.

⁷ <https://www.ASC-aqua.org/news/latest-news/new-group-certification-to-make-it-more-accessible-for-small-producers-to-apply-for-ASC-certification/>

REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES



SDG 10 has ten targets that address discrimination and work towards reduced inequalities, promote inclusion of all, ensure equal opportunities, reduce inequalities through eliminating discriminatory laws and policies, work towards safe migration and mobility, and develop policies across several areas, which progress towards achieving greater equality.

How does ASC contribute?

The elimination of inequality is essential for human rights, as well as progress and development across the world. Requirements in ASC standards that ensure equality and non-discrimination, contribute to employees' human rights.

Although more than half of the targets of this SDG are out of the scope for ASC, as they address inequality on a governmental and international level, ASC can make significant contributions to this SDG through its social requirements. Target 10.2 focuses on the social, economic and political inclusion of all. Non-discrimination requirements are embedded in all ASC standards, with a zero tolerance approach towards discrimination of any kind and towards anybody. Farms must have non-discrimination policies in place that demonstrate how to deal with any incidences of discrimination.

ASC standards require equality of salaries and opportunities among employees. There are also requirements on engagement with local indigenous communities, working with their legislation and ensuring equality of participation in decision making, thereby contributing to target 10.3, which ensures equal opportunities.

How we contribute to the SDG 10 targets

10.1
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10.2

10.3

10.4

10.5
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10.6
-
10.7

10.A
-
10.B
-
10.C
-

How we contribute to the SDG 10 targets

10.2
By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

All ASC standards include rigorous requirements around non-discrimination, for example in Salmon (6.4) and Shrimp (4.3). Additionally, Standards require community engagement, which contributes to the social, economic and political inclusion of all, for example in Salmon (7.1). Some Standards specify the engagement of indigenous people, such as Salmon (7.2) – “respect for indigenous and aboriginal cultures and traditional territories.”

10.3
Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

In addition to ASC species-specific Standards' requirements, the Feed Standard requires that feed mills meet strict social requirements and source ingredients from socially responsible suppliers, Feed, (Principle 2). The Feed Standard takes the ASC's holistic approach to responsible aquaculture and extends it to the feed mills that manufacture aquafeed, as well as the suppliers of their ingredients, as labour-related issues are essentially comparable between those sectors. A series of detailed requirements - See Principles 2 and 3 - ensure that the feed mill is aware of the origin and source of its various ingredients and how/by whom and where the ingredients and their raw materials, are produced.

For instance, independent auditors must verify that feed mills are not using forced or child labour, pay and treat their staff fairly, and must not discriminate on any grounds. They must also be responsible neighbours, communicating proactively with their local communities and responding on community-grievances made towards the mill. Certified feed mills are also required to incentivise their supply chains to adhere to these principles, ensuring an impact in areas where the risk of these issues becomes more prevalent.

Social requirements included in the Feed Standard include but are not limited to the following: legal compliance with labour regulations, in line with ILO-Conventions and the Universal Declaration of Human Rights (UDHR), forced, bonded, compulsory labour or human trafficking, protection of children and young workers, no discrimination, safe and healthy work environment, ensuring employees' right to associate/collective bargaining, work contracts and wage levels, preventing excessive working hours, respecting the dignity and health of employees, ensuring workers, local communities and indigenous people have access to effective grievance mechanisms, local community engagement and respect of indigenous and tribal people's rights, cultures and traditional territories.

10.4
Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality

ASC contributes to this target through the non-discrimination requirements in all ASC standards.

10.7
Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies

This SDG target is only partly within ASC's scope and sphere of influence, which accounts for the low alignment score assigned to it. However, ASC's employment requirements mean that migrant workers must be legal, thereby contributing indirectly to this target.”

Stakeholders from **35** countries provided feedback through **ASC's consultations in 2021.**

MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

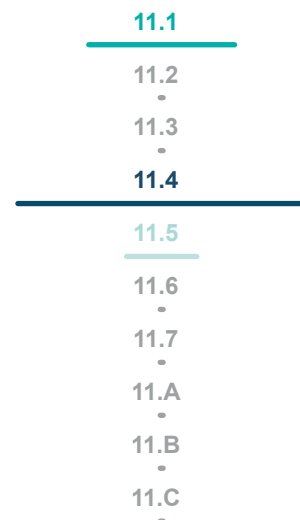


The ten targets of SDG 11 aim to make cities and places where people live safe, sustainable, resilient and inclusive. There are targets to ensure access to housing, basic services, public spaces and safe transport, and targets that protect the world's heritage, enhance sustainable urbanisation, reduce the number of people affected by disasters and support development planning.

How does ASC contribute?

This SDG focuses on human settlements, and ASC has an opportunity to contribute through criteria on accommodation for employees. Where farms or feed mills permit employees and their families to live on site, the Standards include indicators to ensure that the housing is safe and secure, as well as separated by gender where necessary, with access to safe drinking water and sanitation and hygiene facilities. ASC's standards also contribute more broadly to the safety of human settlements in coastal environments through its conservation work.

How we contribute to the SDG 11 targets



Target highlights:

ASC certified farms often provide accommodation for workers and therefore the Standards include criteria to ensure that the accommodation is safe, clean and sanitary, with adequate privacy and access to cooking or catering facilities, potable water, and where necessary, there are gender segregated accommodation and sanitary facilities (target 11.1). As an organisation built around responsible aquaculture, ASC puts conservation and protection of cultural and natural heritage and biodiversity to the fore. As such, ASC standards include many indicators in this respect, including specific indicators aimed at the protection, conservation and restoration of mangroves and requirements to respect the rights of indigenous cultures, traditions and territories.

How we contribute to the SDG 11 targets

11.1
By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

ASC standards include requirements, for example in Shrimp (4.11), on living conditions for employees, contributing to this target through the provision of safe, clean, adequate accommodation to provide for employees' basic needs, with access to drinking water and sanitary facilities.

11.4
Strengthen efforts to protect and safeguard the world's cultural and natural heritage

The whole programme contributes to this target. ASC has many indicators aimed at conserving natural habitats, local biodiversity and ecosystem functions. These include "[No] Allowance for the farm to be sited in a protected area (PA) or High Conservation Value Areas (HCVAs)" such as World Heritage Sites, which is in all ASC standards, except Bivalves, "[No] Allowance for siting farms in critical habitats of endangered species as defined by the IUCN Red List, national listing processes or other official lists," in Abalone, Bivalve, Pangasius, and Shrimp. "Respect of indigenous cultures, traditions and territories..." is also included in all ASC standards.

In addition to the Standards, ASC's work on mangrove restoration contributes to safeguarding the world's natural heritage.

11.5
By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

ASC's work on mangrove restoration contributes to disaster risk reduction in these areas. Many climate-related/water-related tragedies/death tolls can be exacerbated by a degradation of natural habitats such as mangroves in coastal areas.

ASC has various requirements aimed at protecting critical, including wetland habitats and mangroves. The latter for instance play a crucial role in mitigating and building resilience against climate-related extreme events, which will likely increase in frequency/intensity in years to come. Mangrove protection, conservation and restoration are part of ASC's drive to protect biodiversity and the livelihoods dependent upon it, and recognise such important ecosystem functions which in turn help build the resilience of the poor and those in vulnerable coastal positions. See Flatfish (2.3.3), Trout (2.1.2.), Pangasius (2.2.1), Shrimp (2.2.2), Tilapia (2.6.1) and Tropical Marine Finfish (2.3.3).

Shrimp (2.4.1) includes 'Coastal barriers: Minimum permanent or natural barrier between farm and marine environments. Zone of natural vegetation must be 100 metres wide.'

The ASC believes a farm cannot be said to be acting **responsibly** if the community in which it is situated is **negatively impacted by its actions**.

ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS



There are eleven targets in SDG 12, which aim to promote responsible consumption and production, including managing natural resources efficiently, managing chemicals and waste through their whole life cycles, and reducing food and other waste. In addition, targets encourage companies to adopt sustainable practices, and ensure that people have the information and awareness that is necessary for sustainable development.

How does ASC contribute?

ASC's work is in line with the fifth FAO Principle of Sustainable agriculture, which states: "Sustainable food and agriculture requires responsible and effective governance mechanisms." ASC's whole programme, mission and vision is aimed at defining, addressing and contributing to sustainable consumption and production patterns in aquaculture. ASC's Standards include requirements around the efficient use of natural resources, the reduction of waste, the safe management of chemicals and other hazardous substances, and the sustainable production of aquatic foods across the 50 countries where ASC is active.

How we contribute to the SDG 12 targets

12.1	12.7
12.2	12.8
12.3	12.A
12.4	12.B
12.5	12.C
12.6	

Target highlights:

ASC places emphasis on the environmentally sound management of chemicals and wastes. All ASC standards require on-farm documentation that includes, at a minimum, detailed information on all chemicals and therapeutants used during the most recent production cycle, the amounts used, including grammes per tonne of fish produced, the dates used, and which group of fish were treated (target 12.4).

ASC has several criteria in its standards requiring farmers to have policies aimed at the responsible treatment of non-biological waste from production. Standards also require demonstration that a farmer is aware of recycling facilities that are accessible to the farm and evidence that these facilities are used. ASC is also revising its Standards to address plastic waste from aquaculture and made recommendations to use the five R's: Reduce, Re-use, Recycle, Recover, Refuse (target 12.5).

How we contribute to the SDG 12 targets

<p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources</p>	<p>Much of the content of the ASC standards contributes to such "efficient use of natural resources," including feed footprint requirements, waste disposal and recycling. See for example, Salmon Principle 4 and Shrimp Principle 7, "Use Resources in an Environmentally Efficient and Responsible Manner."</p> <p>ASC standards also include "Evidence that all chemicals used on the farm that are discharged to effluent are recorded and quantified," in Abalone (2.4.3), Flatfish (2.2.5) and Tropical Marine Finfish (2.5.4).</p>
<p>12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses</p>	<p>"Use Resources in an Environmentally Efficient and Responsible Manner" is included in Salmon Principle 4 and Shrimp Principle 7. Much of the content of ASC standards contributes to such "efficient use of natural resources," including feed footprint requirements, waste disposal and recycling.</p> <p>ASC standards also include "Evidence that all chemicals used on the farm that are discharged to effluent are recorded and quantified," in Abalone (2.4.3), Flatfish (2.2.5) and Tropical Marine Finfish (2.5.4).</p>
<p>12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment</p>	<p>"Use Resources in an Environmentally Efficient and Responsible Manner" is included in Salmon Principle 4 and Shrimp Principle 7. Salmon (4.5) and Shrimp (7.7) include requirements for disposal of hazardous waste. All ASC standards except Abalone and Bivalves where this is not applicable, require "On-farm documentation that includes, at a minimum, detailed information on all chemicals and therapeutants used during the most recent production cycle, the amounts used, including grammes per tonne of fish produced, the dates used, and which group of fish was treated."</p>
<p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse</p>	<p>"Use Resources in an Environmentally Efficient and Responsible Manner" is included in Salmon Principle 4 and Shrimp Principle 7. ASC has several criteria/indicators in its Standards requiring farmers to have policies aimed at the responsible treatment of non-biological waste from production, via "proper/responsible disposal" and/or recycling, for example. Standards also require "Demonstration that a farmer is aware of recycling facilities that are accessible to the farm and evidence that these facilities are used."</p> <p>Furthermore, ASC is also reviewing the need for new criteria/indicators targeted specifically at the issue of marine litter, plastics and ghost gear, for implementation in future revisions of its Standards and guidance documents. A white paper from ASC entitled "Marine Litter and Aquaculture Gear," published in November 2019, identifies that extreme weather is currently one of the major causes of plastic 'ghost gear' from fish farms entering oceans and rivers, and warns that increasingly unpredictable weather caused by climate change could exacerbate the problem. The document is the first to classify the different causes of plastic waste from aquaculture and to assess the risks associated with different farming systems. It also makes recommendations for the aquaculture industry, which can be summarised using the five Rs: Reduce, Re-use, Recycle, Recover, Refuse.</p>

12.6
Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

The whole ASC programme contributes to target 12.6. The 'Transparency' dimension of ASC certification contributes significantly by making all audit reports and other farm/company data publicly available and requires companies to use ASC performance indicators internally and to communicate them via Sustainability/CSR reports and other sustainability info compendia, such as GSI yearly sustainability reports.

ASC certification is seen as a milestone by farms/companies and valued as such. If/when those companies publish sustainability, CSR reports etc, they quote their ASC achievement.

With the increasing growth of the ASC programme and industry/seafood supply chain awareness related to 'responsible aquaculture' and 'sustainable seafood', the number of companies publishing sustainability reports will increase. Reports are also prompted by ASC's many transparency requirements.

12.8
By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

ASC communicates to all stakeholders in the aquaculture/seafood supply chain re "information and awareness for sustainable development and lifestyles in harmony with nature," relevant to the responsible production of aquaculture products for consumption.

The whole ASC programme includes requirements for corporate policies for social responsibilities, for example, Salmon (6.12). In addition, the forthcoming B2C marketing strategy will highlight the need to promote sustainable development.

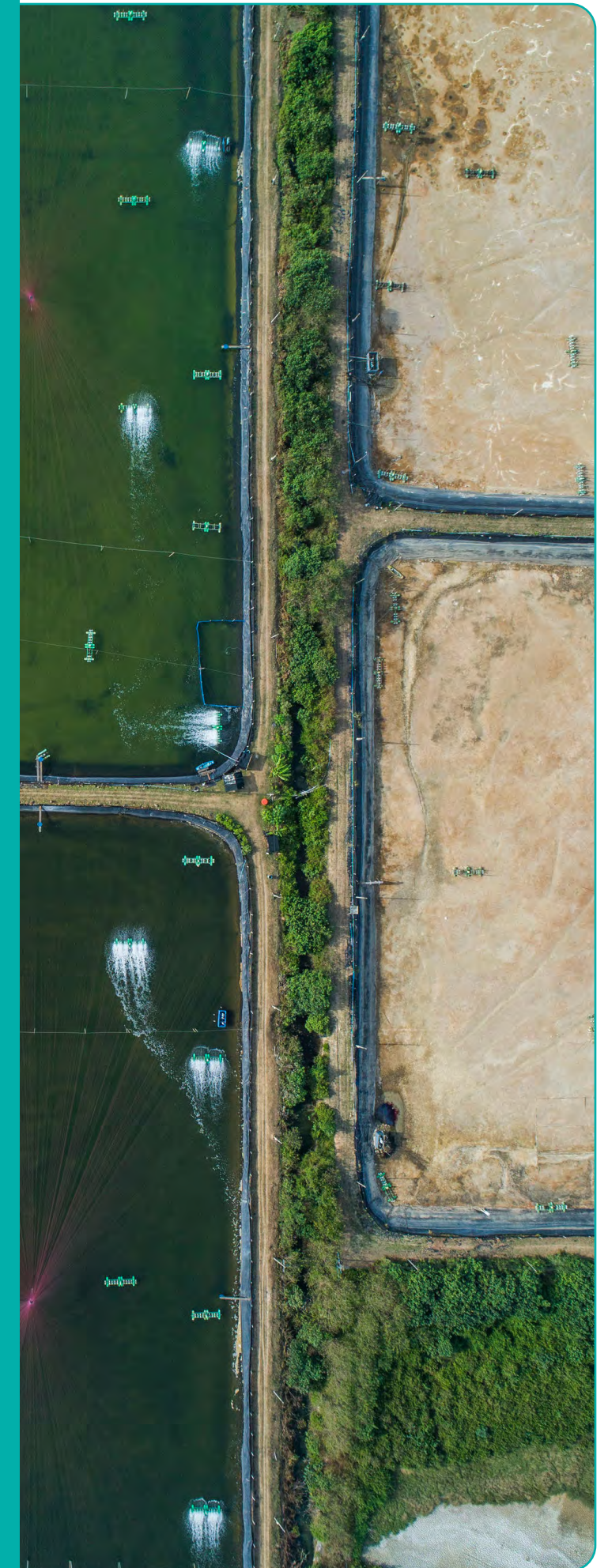
ASC's work through its outreach team, the widespread promotion of the ASC logo, which denotes a responsibly produced product, the many transparency-related indicators in the standards, and ASC's work with retailers and partners to develop their own messaging, all help to develop responsible seafood communities. One important message is that of disclosure on GMO ingredients in feeds: "Evidence of disclosure to the buyer of the farmed [shell]fish of inclusion of transgenic plant raw material, or raw materials derived from transgenic plants, in the feed and for each individual raw material containing > 1% [>2% Sh] transgenic content", is embedded in most ASC standards.

There was a **58.7%** year on year uplift in the **volume of ASC certified seafood** in 2021, due to increased demand for sustainable products.

“Financial performance is increasingly linked to environmental, social and governance performance (‘Triple Impact’ business models), through reputational risks to companies with consumer-facing brands, representing obvious opportunities for producers.”

Blue Food Partnership (2022)

The Road to Sustainable Aquaculture (Table 11, p103)



TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS



SDG 13 addresses climate change and the five targets encourage action to strengthen resilience to climate-related hazards and disasters, ensure that national policies include climate change measures, improve education and awareness of climate change, and improve capacity for planning and management in least developed countries.

How does ASC contribute?

Climate change requires increasingly urgent attention and ASC is responding accordingly, particularly with new requirements in the Feed and upcoming Farm Standards. ASC certified farms and feed mills must monitor energy consumption and several Standards also require greenhouse gas recording and reduction strategies. Furthermore, ASC's Standards promote the protection and conservation of environmentally critical areas, and the protection of habitats and red-listed species.

Target highlights:

As the number of ASC certified farms increases - they are currently present in 38 countries - and the farm-to-fork market globally progresses, the level of communication via the ASC programme, including labelling, market development and marketing increases education and awareness of this important subject (target 13.3).

How we contribute to the SDG 12 targets

13.1

13.2

13.3

13.A

13.B

How we contribute to the SDG 13 targets

13.1

Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Shrimp (2.2) includes "Conservation of protected areas or critical habitats" and "Protecting mangroves and other natural habitats in coastal regions increases resiliency to extreme climatic events," plus "Work on mangroves reduces their exposure." Shrimp (3.1) includes indicators for "Impacts on communities."

ASC requirements are applicable in all countries, not just maritime countries, as natural disasters such as floods, for which Freshwater Trout (2.2) includes 'Riparian Buffer Zones' for example, provides mitigating/contributing requirements.

ASC has various requirements aimed at protecting critical habitats, including wetland and mangroves. The latter play a crucial role in mitigating and building resilience against climate-related extreme events, which will likely increase in frequency/intensity in years to come. Mangrove protection, conservation and restoration are part of ASC's drive to protect biodiversity, the livelihoods dependent upon it, and recognise such important ecosystem functions, which in turn help build the resilience of the poor and those in vulnerable coastal positions. See for example, Flatfish (2.3.3), Freshwater Trout (2.1.2), Pangasius (2.2.1), Shrimp (2.2.2,) Tilapia (2.6.1) and Tropical Marine Finfish (2.3.3). See also SDG 1.5.

13.2

Integrate climate change measures into national policies, strategies and planning

ASC contributes added value through its advocacy and work towards awareness of Climate Change mitigation via adoption by industry of the GHG calculator.

ASC actively participates at EU level in Lifecycle Analysis/ Product Environmental Footprint (LCA/PEF) marine fish scientific/methodology debate and definitions, which include climate change measures.

13.3

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

The way in which ASC helps tackle SDG 12, notably through and combined with ASC market development efforts/programme growth, help to achieve this target. ASC communications also undertakes education efforts re the benefits of the ASC programme in regard to Climate Change Mitigation.

Ongoing outreach/education of retailers and consumers about the merits and necessity of adopting a "more responsible/sustainable" lifestyle, also contributes to this target. As global growth progresses for the ASC Certification programme, which is currently present in 38 countries at farm level, and of the farm-to-fork and market/industry programme, the level of communication via the ASC programme, labelling, market development, marketing, communication and collaboration around the SDG 13.3 issues and climate-change impact preparedness, notably in marine/aquatic and coastal areas, will continue to increase.

ASC has developed an online tool to **consistently measure** and characterise the **GHG impact** of aquaculture.

CONSERVE AND SUSTAINABLY USE THE OCEANS, SEA AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

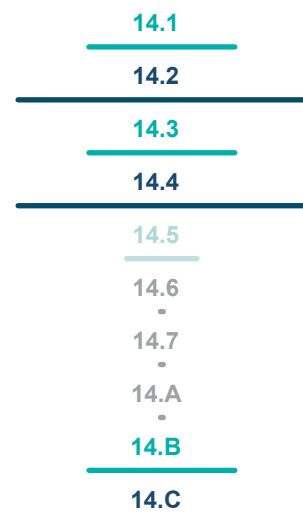


SDG 14 has ten targets that address life below water. The targets cover a wide range of issues, including the reduction of marine pollution, the sustainable management of water-based ecosystems, ocean acidification, overfishing and illegal, unreported and unregulated fishing, the conservation of coastal areas, access for small-scale artisanal fishers to markets, and the increase of scientific knowledge and research.

How does ASC contribute?

SDG 14 with its focus on life under water is a goal where ASC has direct and consistent impacts. The continued increase of aquaculture as a share of global aquatic food contributes towards a reduction in overfishing. ASC standards ensure the protection of marine resources by limiting the use of wild caught fish in feed ingredients and requiring that wild fish is sourced from responsibly managed fisheries. ASC also works to protect marine mammals, High Conservation Value Areas and to establish best practices in gear management and nutrient pollution mitigation.

How we contribute to the SDG 12 targets



Target highlights:

ASC standards contain criteria on water quality, waste, disease prevention, effluent contaminant load, nutrient release, gear recovery and documented clean-up of receiving shorelines. The organisation is also reviewing the need for new indicators targeting the issue of marine litter, plastics and ghost gear, for implementation in future revisions of its standards (target 14.1)

Mangrove forests provide many important ecosystem services, improve resiliency to extreme climatic events, and helping to combat ocean acidification by storing carbon/CO2 efficiently and by increasing the alkalinity of surrounding waters. This is why ASC works towards mangrove protection and restoration. ASC's Coastal Habitat Restoration Fund will also add to the standard's requirements and support the expansion of Mangrove Sustainable Use and Custody Agreements (target 14.3).

How we contribute to the SDG 14 targets

14.1
By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

All ASC standards include requirements to reduce the incidence of marine pollution, including Salmon (2.2) - water quality; Salmon (5.1) - survival and health of farmed fish; Shrimp (5.1) - disease prevention; Salmon (4.5) and Shrimp (7.7) - waste; Salmon (2.3) - nutrient release; and Shrimp (7.5) - effluent contaminant load.

Of particular importance is that ASC is reviewing the need for new criteria/indicators specifically targeting the issue of marine litter, plastics and ghost gear, for implementation in future revisions of its standards or guidance documents. A white paper from ASC entitled "Marine Litter and Aquaculture Gear," published in November 2019, identifies that extreme weather is currently one of the major causes of plastic 'ghost gear' from fish farms entering oceans and rivers, and warns that increasingly unpredictable weather caused by climate change could exacerbate the problem. The document is the first to classify the different causes of plastic waste from aquaculture and to assess the risks associated with different farming systems. It also makes recommendations for the aquaculture industry, which can be summarised using the five R's: Reduce, Re-use, Recycle, Recover, Refuse. See: https://www.ASC-aqua.org/wp-content/uploads/2019/11/ASC_Marine-Litter-and-Aquaculture-Gear-November-2019.pdf

ASC's approach to plastic waste also aligns well with SDG 14. For example, all ASC Standards also include provision for "[No] Allowance for floats made out of open-cell Styrofoam," Bivalve (6.1.3), "Documented clean-up of receiving shoreline in response to gear loss based on local conditions," Bivalve (6.1.6), "Substantial gear (floats, cages, bags, predator nets and racks) is identifiable to farm if applicable," Bivalves (6.1.7), "Provision of equipment for gear recovery such as scoop nets and grapple hooks," Bivalves(6.1.8).

14.2
By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans

The following examples are Principles that include indicators and requirements, which are precisely aimed at addressing SDG 14.2: Salmon Principle 5 - Manage disease and parasites in an environmentally responsible manner; Shrimp Principle 5 - Manage Shrimp Health and Welfare in a Responsible Manner; Salmon Principle 4 - Use Resources in an Environmentally Efficient and Responsible Manner; Shrimp Principle 7 - Use Resources in an Environmentally Efficient and Responsible Manner; Salmon Principle 3 - Protect the Health and Genetic Integrity of Wild Populations; Salmon Principle 2 - Conserve Natural Habitat, Local Biodiversity and Ecosystem Function; Shrimp Principle 2 - Site Farms in Environmentally Suitable Locations while Conserving Biodiversity and Important Natural Ecosystems. For marine-based systems, the overwhelming majority (>99.9%) of aquaculture operations are located in EEZs, and ASC's Standards include many criteria/indicators/requirements that foster an ecosystem-based approach.

14.3
Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

Mangroves play a significant part in combatting ocean acidification by storing x10 more CO2 for the same area than terrestrial forests. ASC works towards mangrove protection and restoration and has requirements aimed at preventing deforestation in general. Ongoing revision of the Shrimp Standard includes Mangroves. There are requirements related to Conservation in the Shrimp Standard, and other GHGe/deforestation considerations in the feed requirements of several Standards, including the forthcoming Feed Standard. ASC launched a Coastal Habitat Restoration Fund in 2020 which supports expansion of "Mangrove Sustainable Use and Custody Agreements."

14.4
By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics

ASC has a strong focus on ensuring that IUU fish do not enter the marine feed ingredients chain. Salmon (5.1) Survival and health of farmed fish; Salmon Principle 4 - Use Resources in an Environmentally Efficient and Responsible Manner; Shrimp Principle 7 - Use Resources in an Environmentally Efficient and Responsible Manner, all contain requirements aimed at fulfilling target 14.4. All ASC standards have criteria ensuring the "Presence and evidence of a responsible sourcing policy for the feed manufacturer for terrestrial and marine ingredients, which includes a commitment to continuous improvement of source fisheries."

Salmon (4.3.4) specifically cites and bans IUU fish from the marine ingredient supply chain, and this will also be a significant requirement in the forthcoming ASC Feed Standard.

14.5
By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information

ASC's link with SDG 14.5 and SDG 14.5.1 is indirect, but nonetheless substantial. Salmon Principle 2 - Conserve Natural Habitat, Local Biodiversity and Ecosystem Function; Shrimp Principle 2 - Site Farms in Environmentally Suitable Locations while Conserving Biodiversity and Important Natural Ecosystems; Shrimp (2.2) - Conservation of protected areas or critical habitats; and Shrimp (2.3) - Consideration of habitats critical for endangered species, all contain requirements that contribute towards fulfilling target 14.4.

ASC ensures that no siting of aquaculture takes place in MPAs/PAs (with some exceptions), whereas the SDG requirement to create 10% MPAs by 2020 is a regulatory requirement outside of ASC's remit. However, ASC helps to achieve this target by raising the profile of Responsible Aquaculture and promotes awareness of environmental sustainability.

Areas within all ASC standards of relevance to promoting SDG 14.5 include requirements on biodiversity, predator control, mortality of ICUN red-listed species, establishment, measuring and monitoring of baselines, restriction on the establishment of farms in HCVA's, community and stakeholder engagement, and an ability to make complaints about or appeal certification and the traceability and sustainable sourcing of marine feed ingredients

14.B
Provide access for small-scale artisanal fishers to marine resources and markets

ASC's whole programme, including the Improver Programme and Group Certification are aligned with this target, as they actively promote access for small-scale artisanal fishers. Examples include "[No]Changes undertaken restricting access to vital community resources without community approval" in Abalone (6.1.1), Salmon and Seriola and Cobia (7.3.1) and Tilapia (7.10.1).

14.C
Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want

ASC is dedicated by design to SDG 14.C, "Enhance the conservation and sustainable use of oceans and their resources," as this tenet underpins ASC's Vision and Mission. There is also strong interlinkage between this SDG Target and other SDG 14/SDG 12 targets, against which ASC is well aligned and performs strongly.



The continued **growth** of ASC certified seafood **alleviates pressure on our oceans**, while delivering on market demands.

“The interconnected nature of the SDGs makes them indivisible by nature, with progress in one area supporting and reinforcing progress in another. Hence there is a strong emphasis on integrated approaches to development, and results from related indicators must be jointly evaluated to allow a comprehensive analysis of the impacts and trade-offs between different development paths.”

UN FAO

SOFIA Report (p157), Part 3 “Blue Transformation to achieve the 2030 Agenda for Sustainable Development

PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS



SDG 15 focuses on life on land, with twelve targets that aim to protect, restore and sustainably use land. The targets focus on the conservation of different ecosystems, the sustainable management of forests, combatting deforestation, desertification and the degradation of natural habitats, restoring degraded land, soil and forests. They encourage taking action to end poaching and trafficking of protected species, reduce the impact of invasive alien species and integrate these values into planning and financial policies.

How does ASC contribute?

Deforestation is prohibited by ASC standards when it comes to the sourcing of plant feed ingredients such as soy, and the Feed Standard has further strengthened and broadened existing requirements for traceable terrestrial ingredients. ASC works to protect groundwater sources and wildlife, and promotes the responsible, controlled handling and waste of chemical materials. ASC runs a project on mangrove conservation, contributing to the protection of this important resource.

Target highlights:

ASC's Standards require the conservation of natural habitats and local biodiversity and ecosystem functions, the conservation of protected and critical areas, high levels of water quality, and the prevention of salinisation of freshwater and soil resources (target 15.1). ASC encourages, promotes and ensures the sourcing of terrestrial feed ingredients from sustainable agriculture sources, with a specific focus against deforestation. ASC also runs a project working for the conservation of mangroves and wetlands in Ecuador (target 15.2).

How we contribute to the SDG 15 targets

15.1	15.7
15.2	15.8
15.3	15.9
15.4	14.A
15.5	14.B
15.6	14.C

How we contribute to the SDG 15 targets

15.1
By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

ASC principles and indicators that demonstrate alignment with target 15.1 include: Salmon Principle 2 - Conserve Natural Habitat, Local Biodiversity and Ecosystem Function; Shrimp Principle 2 - Site Farms in Environmentally Suitable Locations while Conserving Biodiversity and Important Natural Ecosystems; Salmon (2.2) - water quality; Shrimp (2.2) - Conservation of protected areas or critical habitats; Shrimp (2.3) - Consideration of habitats critical for endangered species; Shrimp (2.5) Prevention of salinisation of freshwater and soil resources.

In addition, there are requirements for the "Presence and evidence of a responsible sourcing policy for the feed manufacturer for terrestrial and marine ingredients that includes a commitment to continuous improvement of source fisheries," in Abalone (5.1.1 and 5.2.2), Salmon (4.3.5), Seabass and Meagre, Seabream, Seriola and Cobia and Tropical Marine Finfish (4.4.1), and Tilapia (5.2.1).

"Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed and feed ingredients, including that comply with recognised crop moratoriums and local laws," is in Abalone (5.1.1), Freshwater Trout (5.4.1), Salmon, Seabass, Seabream and Meagre, Seriola and Cobia, and Tropical Marine Finfish (4.4.1), and Tilapia (5.2.1).

"Percentage of soy or soy-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent - ISEAL member's certification scheme that addresses environmental and social sustainability" is in Freshwater Trout (5.4.2), Salmon (4.4.2), Flatfish, Seabass, Seabream and Meagre, Seriola and Cobia, and Tropical Marine Finfish (4.4.3) and Shrimp (7.2.2).

15.2
By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

ASC encourages, promotes and ensures that terrestrial feed ingredients, which are the majority input into farmed fish production, are sourced from sustainable agriculture sources. ASC has a specific focus against deforestation, such as in the Amazon Forest. ASC also runs a project on mangrove conservation, which contributes to the protection of this important resource.

Freshwater Trout (5.4.2), Salmon (4.4.2), Flatfish, Seabass, Seabream and Meagre, Seriola and Cobia and Tropical Marine Finfish (4.4.3) and Shrimp (7.2.2) all contain requirements on the "Percentage of soy or soy-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent. This is the ISEAL members' certification scheme that addresses environmental and social sustainability."

15.3
By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

Prevention of salinisation of freshwater and soil resources is a requirement in Shrimp (2.5). In addition, "strive[ing] to achieve a land degradation-neutral world" is an integral part of ASC's ethos and is included in the section on terrestrial components in the forthcoming Feed Standard.

15.5
Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

ASC is well aligned with this target, for example in Salmon Principle 2 - Conserve Natural Habitat, Local Biodiversity and Ecosystem Function; Shrimp Principle 2 - Site Farms in Environmentally Suitable Locations while Conserving Biodiversity and Important Natural Ecosystems; Shrimp (2.3) - Consideration of habitats critical for endangered species; Salmon (3.4) - Escapes; Shrimp (6.1) - Presence of exotic or introduced shrimp species. In addition, Salmon (4.3.4) states: "[No] Feed containing fishmeal and/or fish oil originating from by-products or trimmings from IUU catch AND/OR from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species."

There are also several indicators in ASC standards re "No allowance for harm to threatened/endangered species or the habitat on which they depend," and/or "Only non-lethal management (e.g. exclusion, deterrents and removal) of IUCN critical species that are pests or predators."

15.8
By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species

This target is addressed in Salmon (3.4) - Escapes, and Shrimp (6.1) - Presence of exotic or introduced shrimp species, both of which demonstrate ASC's alignment.

15.9
By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts

This target is aimed more at national/local regulatory and policy levels. However, ASC's whole programme is in alignment with Aichi Biodiversity Target 2, from which target 15.9 originates, in terms of ecosystems and biodiversity intersecting/interacting with the aquaculture supply chain, including feed ingredients and operations.

PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS



The twelve targets of SDG 16 work towards the end of all forms of violence against children, and the reduction of violence rates, illicit arms and financial flows, corruption and bribery. The targets also promote inclusive decision-making at all levels, participation of developing countries in global governance, legal identity for all, access to information and the promotion of effective, accountable and transparent institutions.

How does ASC contribute?

ASC contributes in several ways to the achievement of peace, justice and strong institutions and to the abolition of child labour. The certification process involves feedback from local and indigenous communities, and farms and feed mills must proactively engage in meaningful consultation with these groups. ASC's whole certification system promotes transparency and independence, through use of third party auditors. The Standards include requirements on transparency, including transparent working contracts for employees, non-discriminatory laws, and policies for sustainable development.

How we contribute to the SDG 16 targets

16.1	16.7
16.2	16.8
16.3	16.9
16.4	16.10
16.5	16.A
16.6	16.B

Target highlights:

Any form of violence against children and use of child labour is forbidden in all ASC standards. A hallmark of ASC Standard setting is its independence and impartiality. ASC does not receive any income from farms seeking certification. The Conformity Assessment Bodies (CABs) which audit farms and deliver ASC certification are chosen and accredited independently and carry out unannounced audits. ASC has a strong focus on transparency in the Standards. All audit reports and farm production data are publicly available, and workers' contracts must be fair and transparent (target 16.6). ASC consistently involves stakeholders in decision-making processes, including through the public consultation periods during Standard development and revision, multi-stakeholder consultations on audit results of farms seeking certification, and stakeholder comments on audit findings. ASC standards also require proactive consultation with indigenous communities (target 16.7).

How we contribute to the SDG 16 targets

16.1
Significantly reduce all forms of violence and related death rates everywhere

ASC makes a significant direct and indirect contribution to SDG 16 by embedding applicable indicators and requirements in its Standards, including: "[No] forced, bonded or compulsory labour," and "[No] discrimination."

All ASC standards require "Evidence of comprehensive and proactive anti-discrimination policies, procedures and practices" and that the "Number of incidences of discrimination" be nil. Furthermore, there must be "Equality of pay, benefits and promotion opportunities for all workers." ASC's "No Discrimination" ethos and requirements contribute to a workplace culture that could also extend somewhat to the household and local community and is conducive to "reducing all forms of violence" within ASC's sphere of influence.

All ASC standards require evidence that 100% of health and safety-related accidents and violations are recorded, and corrective actions are taken when necessary. There is also a ripple effect extending to its subcontractors, with many Standards requiring "Evidence of a policy to ensure social compliance of suppliers and contractors." See Finfish, Salmon, Seabass, Seabream and Meagre, Tropical Marine Finfish (6.7.2) and Seriola and Cobia (6.9.2).

In addition, ASC draft Farm Standard (3.10.1) states: "The UoC shall have a transparent procedure to respond to breaches of company rules, applying clear levels of escalation, ensuring dignity and respect towards the employee."

The ASC Farm Standard also has a requirement prohibiting violence and harassment - see 3.5.14 "The UoC shall not engage in, or tolerate, violence or harassment in any form (including sexual harassment or abuse, or any other form of mental physical or verbal harassment or abuse)."

16.2
End abuse, exploitation, trafficking and all forms of violence against and torture of children

Child labour is addressed in all ASC standards with explicit requirements not to allow it, for example in Salmon (6.2) and Shrimp (4.1).

16.3
Promote the rule of law at national and international levels and ensure equal access to justice for all

"Promote the rule of law at national and international levels and ensure equal access to justice for all" is underpinned and embedded in all ASC standards in Principle 1, for example in Salmon (1.1) and Shrimp (1.1). All ASC standards also include indicators/ requirements for complaint procedures/ mechanisms, which include reporting of violence and discrimination.

"Implementation of a verifiable conflict resolution policy for conflicts and complaints tracked transparently" is included in Pangasius (7.11.4), Shrimp (4.10.3) and Tilapia (7.8.3).

"Evidence of worker access to effective, fair and confidential grievance procedures" is in Flatfish, Salmon, Seabass, Seabream and Meagre, and Tropical Marine Finfish (6.8.1), Pangasius (7.11.1) and Shrimp (4.10.1 - 4.10.3).

"Presence and evidence of an effective policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organisations" is included in all Standards.

16.5
Substantially reduce corruption and bribery in all their forms

ASC uses a tripartite system to reduce risk, whereby a third party certification body (CAB) is chosen by a farm independently from the standard setter. Specific references include: "Worker contracts are fair and transparent," in Shrimp (4.9), and "Independence and impartiality: No monies from farm seeking certification received by certification programme for any aspect of pre-audit/audit process, and Independent (from standard setter) accreditation/ qualification of CABs."

Whilst the ASC programme itself is independent/transparent and open to scrutiny, the auditing of company procedures does not necessarily rule out corruption/bribery from corporate practices. This area is not specifically differentiated from corporate responsibility dimension/requirements in the current ASC standards but will be addressed in forthcoming revisions. See Alignment (6.12.3).

16.6
Develop effective, accountable and transparent institutions at all levels

ASC is in alignment with target 16.6 in a number of ways, through requirements in its Standards. For example: Independence and impartiality - No monies from farm seeking certification received by certification programme for any aspect of pre-audit/audit process; Certification programme itself under third party supervision and peer scrutiny; Independent (from standard setter) accreditation / qualification of CABs; Rigorous monitoring and evaluation process (MandE) to assess programme's impacts; regular revision of standards via multi-stakeholder process; third party certification body (CAB) chosen by farm independently from standard setter; and unannounced risk-based audits by CABs.

Transparency – Audit reports made publicly available; farm production data made public; producer to inform buyer if feed contains GMO plant ingredients; external biodiversity expert assessment compulsory, with results made publicly available; social impact assessment for pangasius and shrimp farms; chain of custody (CoC) certification is mandatory for farm-to-fork assurance; non-conformities in farm performance leading to certificate suspensions reported on ASC website. Examples include traceability of raw materials in feed, salmon (4.1) and Shrimp (7.1); worker contracts are fair and transparent, Shrimp (4.9); fair and transparent worker management systems in Shrimp (4.10); complaints by affected stakeholders are being resolved, Shrimp (3.2); transparency in providing employment opportunities within local communities, Shrimp (3.3); and contract farming arrangements if practiced, are fair and transparent to the contract farmer, Shrimp (3.4).

16.7
Ensure responsive, inclusive, participatory and representative decision-making at all levels

ASC promotes this target through multi-stakeholder consultation on audit results of farms seeking certification, a rigorous monitoring and evaluation process (MandE) to assess programme impacts, and regular revision of standards via multi-stakeholder process, and public/stakeholder ability to comment on audit findings prior to final publication and/or to file complaint to independent third party about CAB's performance.

Examples include community engagement in Salmon (7.1), complaints by affected stakeholders are being resolved in Shrimp (3.2); evidence that the farm has undertaken proactive consultation with indigenous communities in Bivalve (6.1), Freshwater Trout (6.9) and Salmon (7.2), evidence of acknowledgement of indigenous groups' rights in Bivalve (6.1), and requirements for farm owners to undertake a participatory social impact assessment (pSIA, in Pangasius (7.13.1 and 7.13.2) and Shrimp (3.1.1).

16.10
Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements

The ASC certification programme operates under third party supervision and peer scrutiny. Transparency is assured through audit reports and farm production data being made publicly available, and a requirement for the producer to tell the buyer if feed contains GMO plant ingredients. An external expert assessment with results made publicly available is compulsory to comply with the ASC Biodiversity assessment. Non-conformities in farm performance under the impact measure requirement can lead to certificate suspensions, which are made public on the ASC website.

All ASC standards have social/labour/working condition criteria/indicators/requirements focusing on "Freedom of association and collective bargaining" and requiring "Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference." Furthermore the transparency dimension of the ASC – and the many public disclosures and engagements required by the ASC certification programme - is one of the key characteristics setting it apart from other aquaculture certification schemes/ecolabels. The audit reports of all farms in the ASC programme, draft standards and many other documents are published on the ASC website, allowing anyone to access valuable data about the industry. Many other relevant ASC documents are also published online, and public consultation are carried out when new standards or operational reviews are underway. Some specific standard requirements reconcile the ASC's multi-stakeholder ethos with the need to make responsible aquaculture operations more transparent.

For instance, whilst all the ASC standards ban the production of transgenic/GMO fish and shellfish, they also ensure transparency around any transgenic material/ingredients (>1% or 2%) used in the feed, in order to support informed choices by retailers and consumers. For farmers to become ASC certified, there are many requirements for public disclosure and these are input in the audit reports and/or must be communicated by the farmer directly to the public/stakeholders. The Salmon Standard, for example, uniquely includes a full set of transparency requirements in Annex VI of dozens of salmon farms' performance data related to water quality, wildlife interactions, escape and unexplained losses data, sea-lice and benthic parasiticide monitoring levels, antibiotic loads etc.

In addition, companies must use ASC performance indicators internally and where possible, communicate them via sustainability/CSR reports and other sustainability information such as the GSI annual Sustainability Reports.

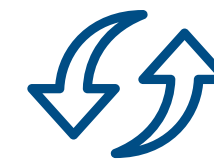
16.B
Promote and enforce non-discriminatory laws and policies for sustainable development

All ASC standards have criteria/indicators aimed at eliminating discrimination on aquaculture farms and often in their supply chain. For example, the forthcoming Feed Standard has requirements for providers of broodstock/fish juveniles. This target is also addressed in Salmon (6.4.) and Shrimp (4.3) - Non-discrimination, Salmon (7.2) - Respect for indigenous and aboriginal cultures and traditional territories.

ASC recommends using the five R's:



Reduce



Re-use



Recycle



Recover



Refuse

STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

17 PARTNERSHIPS FOR THE GOALS



SDG 17 has nineteen targets aimed at strengthening the implementation of the other sixteen SDGs, mobilising resources, assisting developing countries, promoting international collaboration, and contributing to the SDGs on a policy and governmental level.

How does ASC contribute?

Although much of this SDG is directed at government and international institutions, ASC contributes through its promotion of public, private and civil-society partnerships at both intra- and international levels and works collaboratively with governments and NGOs on many projects aimed at promoting responsible aquaculture.

Target highlights:

As an organisation, ASC is part of several collaborations for sustainable development and has a multi-stakeholder ethos, working with partnerships, including pre-competitively, around the globe (target 17.16).

How we contribute to the SDG 17 targets

17.1	17.8	<u>17.14</u>
17.2	17.9	<u>17.15</u>
17.3	17.10	<u>17.16</u>
17.4	17.11	17.17
17.5	17.12	17.18
17.6	17.13	17.19
17.7		

How we contribute to the SDG 17 targets

- 17.14**
Enhance policy coherence for sustainable development
- 17.15**
Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development
- 17.16**
Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries

ASC works hard to promote responsible production and sustainable development through policy and market considerations. ASC is actively engaged with various partners at NGO/industry/country/international levels, including governments, helping to frame coherent and responsible environmental and social policies applicable to aquaculture industries/stakeholders. Considerable work has been undertaken in Indonesia, Thailand and China for example.

As a voluntary certification scheme, the ASC programme enables ASC certified farms to fulfil the requirements of 17.15, as legal compliance is a compulsory requirement criterion for all ASC standards in Principle 1.

ASC respects national jurisdictions, whilst offering a framework for going above and beyond. This in turn makes ASC a respected stakeholder in the global/national landscape.

ASC's multi-stakeholder ethos and the partnerships in which it is collaboratively involved, including pre-competitively around the globe, all help to address SDG 17.16. ASC is particularly active in developing countries.

In 2021, ASC collaborated with over 230 commercial and non-commercial partners.

Recommendations and Next Steps

Positive SDG contributions and outcomes for our one and only Blue Planet requires absolute transparency and ASC is the setting standard for seafood through its responsible aquaculture vision. This comes at a time where credible SDG data assurance and transparency – whilst lacking - is becoming increasingly important in enabling industry to gain a Social Licence to Operate (SLO) and fulfill ESG obligations.

Without transparency, and in the eye of the general public, aquaculture operators risk being accused of greenwashing, when they only use self-reported SDG performances. This also ties in and overlaps with other due diligence risk factors. As SDG performance claims are increasingly made across a broad range of corporations, industries and institutions, the key performance indicators (KPIs) linked to SDG performances and the data quality upon which these assessments are made, need to be verifiable and third party audited and made available to the public. This will ensure and assure their credibility and provide the necessary accountability to interested stakeholders.

Whilst acknowledging that improvements can be made, the ASC's tentative SDG mapping and performance methodology provides a roadmap that enables operators to gain credibility for their SDG alignment claims and helps them to mitigate the risk of being called out. With Horizon 2030 looming, the need to tackle transparency head on, avoid greenwashing, and provide SDG and ESG-aligned data assurance, has never been more pressing.

Rating SDG achievements at target level can help institutions, governments, financiers, corporations (ESG), industries and other stakeholders embed assurance based indicators of SDG performances in their policy and assessment work and add to knowledge in the aquaculture field.

The ASC concludes that:

- Quantifiable and transparent, verifiable substantiation by third party assurance will help mitigate against claims of SDG greenwashing and will provide quality of SDG performance data to interested stakeholders.
- Beyond the aquaculture industry, the proposed SDG rating methodology provides a pathway towards measuring and comparing any sector or industry contributions towards the SDGs and their targets at Horizon 2030.

ASC encourages aquaculture organisations and other industries to begin mapping and objectively quantifying their detailed and substantiated progress towards meeting all relevant SDG targets, and to publish the results for the benefit of all stakeholders.

We would welcome all/any feedback (please email Bertrand Charron: ASC Director of Market Research and Insights: Bertrand.Charron@asc-aqua.org and Clare Stevens, Senior Coordinator Social Standards: Clare.Stevens@asc-aqua.org in view of improving the next iteration of this report and better understanding the relevance of SDG reporting to our stakeholders.



