

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



## Annex One

Materiality Assessment & Contributions Matrix

2022



## How do ASC programme versus non-transparent aquaculture operations verifiably address the SDGs?

Mapping quantitatively the Aquaculture Stewardship Council (ASC) programme against the 17 UN SDGs' 169 targets

(2022 edition; See Methodology for scope, details of calculation and colourings)

SDG and SDG Target #	<p style="text-align: center;"><b>Substantiation for ASC and SDG mapping/scorings</b></p> <p style="text-align: center;">NB: the substantiations quoted below are examples and do not pertain to represent an exhaustive listing (many other standards requirements/indicators and references to other initiatives may apply).</p> <p style="text-align: center;"><b>Ab = Abalone; Bi = Bivalves; FF = Flatfish; Tr = Freshwater Trout; Pa = Pangasius; Sa = Salmon; SSM = seabass/seabream/meagre; SC = Seriola/cobia; Sh = Shrimp; Ti = Tilapia; TMF or TMFF = Tropical Marine Finfish; Sw = Seaweed</b></p> <p style="text-align: center;"><b>NB:</b> When a species is quoted below; it is an abbreviated way to mention the corresponding standard (e.g. 'Shrimp 3.1' refers to the indicator(s) requirements in the ASC Shrimp Standard Criteria 3.1. etc.</p>	ASC SDG rating - Direct	ASC SDG rating - Indirect	Overall ASC SDG Target rating - (Direct + Indirect)
<b>SDG 1</b>	<b>SDG 1 - End poverty in all its forms everywhere</b>	<b>ASC SDG 1 Overall contribution score = 2.6</b>		
1.1	<p>This is a core value underpinning the ASC mission/ethos, defining indirectly how aquaculture should perform in order to be responsible. In practice. Many indicators are not tailored towards the specific achievement, but globally the ASC programme aims to accomplish it.</p> <ul style="list-style-type: none"> <li>■ All ASC standards mitigate against this level of poverty via Legal Compliance (Principle 1) indicators and 'Payment of fair and decent wages' and/or 'Evidence that the employer is working toward the payment of basic needs wage' [i.e. makes a distinction between 'Minimum' and 'Basic' wages; with Basic &gt; Minimum]; All of the ASC standards are embedded with requirements re 'Payment of fair and decent wages' to the farm's workforce.</li> <li>■ ASC is a member of the Global Living Wage Coalition, working with other organisations to understand the gap between the prevailing wage and a living wage. Together we are applying the Global Living Wage Coalition benchmarks to work towards achieving living wages for employees in all production systems across the world. For example, the Pangasius Standard (7.9.1) refers to 'living wage' in its definition of 'wages that cover basic needs' [Note 79: '....The basic needs wage/living wage refers to 'take home payment..''] Additionally, widespread discrimination, which takes many forms and affects all genders and notably women in the working environment, can negatively affect overall poverty and economic development rates. All ASC standards have criteria/indicators aimed at eliminating discrimination on aquaculture farms and some also refer to the supply chain, for example in the forthcoming Feed Standard, which sets out requirements for providers of broodstock/fish juveniles etc.</li> <li>■ Contributing to sustainability, responsible farming and good labour rights/working conditions contributes to a reduction in poverty. By ensuring well paid/fairly rewarded work, including a "Living Wage" workstream, ASC helps contribute to people in industries/countries coming out of +/-extreme poverty. The alternative and sometimes reality for non-ASC farms is to have poorly/unfairly remunerated employees remaining in a cycle of poverty. The 'social' dimension of ASC standards (Principles 6/7, Future P3) contribute towards ensuring farms' social responsibility, including indicators aimed at 'decent' or 'fair' wages [exploring 'living wage' - TBD]. requirements (e.g. Salmon 6.6) highlight the importance of workers' basic wages meeting the legal minimum wage and being rendered to workers in a convenient manner.</li> <li>■ Direct contribution through employment on the farm and indirect contribution through the presence of industry in the community, which brings in eg auditors and other workers who spend money locally.</li> <li>■ In the ASC Species-standards, refer to Fair and decent wages Ab 7.5.1, Bi 7.5.1, FF 6.6.1-6.6.3, Tr 6.5.1, 6.5.2, Pa 7.9.1-7.9.3, Sa 6.6.1-6.6.3, SSM 6.6.1-6.6.3, 6.9.2, SC 6.5.1-6.5.3, Sh 4.5.1-4.5.4, Ti 7.5.1, TMFF 6.6.1-6.6.3; Access to vital community resources Ab 6.1.1, Pa 7.13.1; 7.15.1, Sa 7.3.1, 7.3.2, SC 7.3.1, 7.3.2, Sh 3.1.1, Tr 6.3.1, Ti 7.10.1.</li> <li>■ ASC's participation in the Mangrove project via Socio Manglar, a conservation incentives programme implemented by Ecuador's government, which oversees funds from the Coastal Habitat Stewardship Fund; ASC in partnership with Conservation International and the Ecuadorian Government's Ministry of Environment sees local associations given regular economic incentives, as well as access to mangrove areas in return for voluntarily committing to Sustainable Use and Stewardship Agreements to protect and maintain mangrove areas.</li> </ul>	3	0.5	3.5

1.2	<p>Contributing to sustainability, responsible farming and good labour / working conditions contributes to a reduction in poverty. Re SDG 1.2.1: Can be linked to above rationale (re. SDG 1.1): As an increasing proportion of the global aquaculture industry (market Transformation/Theory of Change) meets ASC standards, this will help various regional/countries' industry workers livelihoods improve.</p> <ul style="list-style-type: none"> <li>Direct contribution through employment on farms. Links to ASC impacts/achievements on a global scale (# of farms/products, tonnage/species certified and other impact metrics)</li> <li>Indirect contribution via beneficial community ripple effects.</li> <li>Re. ASC Species-standards ; See... [Fair and decent wages] Ab7.5.1; Bi 7.5.1; FF [6.6.1-6.6.3]; Tr 6.5.1, 6.5.2; Pa [7.9.1-7.9.3]; Sa [6.6.1-6.6.3]; SSM [6.6.1-6.6.3], 6.9.2; SC [6.5.1-6.5.3]; Sh [4.5.1-4.5.4]; Ti 7.5.1; TMFF [6.6.1-6.6.3]; [Access to vital community resources] Ab 6.1.1; Pa 7.13.1; 7.15.1; Sa 7.3.1, 7.3.2; SC 7.3.1, 7.3.2; Sh 3.1.1; Tr 6.3.1; Ti 7.10.1; + many other related indicators/requirements</li> </ul>	3	0.5	3.5
1.3	<p>E.g. Shrimp 4.4 and Salmon 6.5 - Work environment health and safety + other standards' requirements. The Seriola and Cobia [6.3.4]; and Shrimp [4.3.4; 4.8.7] standards require that maternity rights and benefits be respected.</p> <ul style="list-style-type: none"> <li>Furthermore, the entire ASC programme assists... The 'Social' dimension of ASC standards (Principles 6/7; Future Farm Standard P3, Current Feed Standard P1 criteria) contribute towards ensuring farms' social responsibility (towards workers/employees and local communities). This includes criteria / indicators / requirements re. Freedom of association and collective bargaining; Child labour; Forced, bonded or compulsory labour; Discrimination; Work environment health and safety; Wages; Contracts (labour) including subcontracting; Conflict resolution; Disciplinary practices; Working hours and overtime; Education and training; Corporate policies for social responsibility.</li> <li>NB: While there are lots of indirect impacts through providing social protection, none/ver few of the indirect impacts fall under this target, which is focused on the existence of social protection systems.</li> <li>Re. ASC Species-standards ; See... [Fair and decent wages] Ab7.5.1; Bi 7.5.1; FF [6.6.1-6.6.3]; Tr 6.5.1, 6.5.2; Pa [7.9.1-7.9.3]; Sa [6.6.1-6.6.3]; SSM [6.6.1-6.6.3], 6.9.2; SC [6.5.1-6.5.3]; Sh [4.5.1-4.5.4]; Ti 7.5.1; TMFF [6.6.1-6.6.3]; [Access to vital community resources] Ab 6.1.1; Pa 7.13.1; 7.15.1; Sa 7.3.1, 7.3.2; SC 7.3.1, 7.3.2; Sh 3.1.1; Tr 6.3.1; Ti 7.10.1; + many other related indicators/requirements</li> </ul>	1	0	1
1.4	<p>Much of the ASC programme contributes to target 1.4 directly; and quite strongly so. Many of the criteria/indicators/requirements embedded in various standards' principles.</p> <ul style="list-style-type: none"> <li>E.g. Shrimp 4.3 and Salmon 6.4 - non-discrimination requirements; Shrimp 3.1 - control over land - Participatory Social Impact Assessment (p-SIA), + other standards' requirements. Some ASC standards (e.g. Pangasius 7.15.1/7.15.2 and Shrimp 3.3.1) have embedded requirements to favour Local Employment / Supporting local community, which in turns allow for equal rights to economic access ("evidence of advertising positions to people living within daily traveling distance from the farm before hiring people who cannot travel to and from home on a daily basis.").</li> <li>Furthermore criteria/indicators/requirements aimed at ensuring local communities' "Access to resources" are included in all standards. These include (but isn't restricted to): "[No] Changes undertaken restricting access to vital community resources without community approval" [Abalone 6.1.1; Salmon and Seriola/Cobia 7.3.1; Tropical Marine Finfish 7.10.1]; "Farm does not impede navigation, aquatic animals or water movement" ([Bivalve 6.1.5; Pangasius 2.3.1]; "Evidence of assessments of company's impact on access to resources. " [Pangasius 7.13.1; Salmon, Seriola and Cobia 7.3.2; Shrimp 3.1.1]. Etc.</li> </ul>	2	0	2
1.5	<ul style="list-style-type: none"> <li>Protecting mangroves and other natural habitats in coastal regions plays a significant role and increases resiliency to extreme climatic events (which will likely increase in frequency/intensity in years to come #ClimateChange).</li> <li>E.g. Shrimp 3.1 - impacts on communities. ASC has various requirements aimed at protecting critical (incl. wetland) habitats, including mangroves. The latter for instance play a crucial role in mitigating and building resilience against climate-related extreme events . NB: ASC's work on mangrove protection means that communities' risk is reduced, but the work isn't necessarily directed 'towards' risk reduction, rather it's a (i.e. partly indirect) by-product of ASC's conservation work.</li> <li>The Mangrove project (via Socio Manglar, a conservation incentives programme implemented by Ecuador's government, which oversees the funds from the Coastal Habitat Stewardship Fund: a partnership between the ASC, Conservation International and the Ecuadorian government's Ministry of Environment) where local associations are given regular economic incentives as well as access to mangrove areas in return for voluntarily committing to Sustainable Use and Stewardship Agreements to protect and maintain mangrove areas.</li> <li>Furthermore, under the Pangasius (7.13.1/7.13.2) and Shrimp (3.1.1) standards; further outreach re. 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"</li> </ul>	2	1	3
1.A	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "			
1.B	standards are not 'Policies'. This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "			
SDG 1	<b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	11 + 2 = 13 / 5 = SDG score of 2.6		

SDG 2	SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	ASC SDG 2 Overall Contribution score = 3		
2.1	<p>This ('End Hunger' / Food Security) is integral to the ASC Vision and is a core value underpinning ASC mission/ethos, and one of the very reason why ASC was set-up. "The ASC Vision: A world where aquaculture plays a major role in supplying food and social benefits for humanity whilst minimising negative impacts on the environment.": Whole programme contributes to food security despite the fact that this SDG target falls only partly directly within its "sphere of influence"; ASC's indirect contribution is very strong here.</p> <ul style="list-style-type: none"> <li>■ In practice... (Too) many indicators are not specifically tailored towards that specific achievement since the programme is focused on 3rd party transparent and credible certification at Farm level (and market transformation). ASC's Theory of Change and Mission thus focuses more on transforming the industry/food system in order to enable the sustainable/responsible production of farmed seafood. Globally, the entire ASC programme thus aims -- and is designed - to achieve SDG 2.1; but this is why ASC's Indirect Contribution towards SDG 2.1 is greater than it's direct contribution; yet both contributing to the same goal.</li> <li>■ Furthermore, the production of farmed seafood certainly contributes to the "healthy and nutritious" food dimension too.</li> <li>■ ASC programme / standards, by ensuring 'fair and decent' conditions -- and ensuring access to resources for local communities is maintained; and protecting the rights of indigenous populations -- arguably contributes to improving living conditions in impoverished areas, and thus (arguably) helps diminish the prevalence of undernourishment.</li> <li>■ Re. ASC Species-standards ; See... [Vulnerable people' and Access to vital community resources] Ab 6.1.1; Pa 7.13.1; 7.15.1; Sa 7.3.1, 7.3.2; SC 7.3.1, 7.3.2; Sh 3.1.1; Tr 6.3.1; Ti 7.10.1; [Respect for indigenous and aboriginal cultures and traditional territories] Bi 6.1.11, 6.1.12; Tr 6.9.1, 6.9.2; Sa [7.2.1-7.2.3]; SC 7.2.1 + many other related indicators/requirements</li> <li>■ Etc.</li> </ul>	2	1.5	3.5
2.2	<p>This ('End Hunger' / Food Security) Goal/Target is integral to the ASC Vision and is a core value underpinning ASC mission/ethos, and one of the very reason why ASC was set-up. "The ASC Vision: A world where aquaculture plays a major role in supplying food and social benefits for humanity whilst minimising negative impacts on the environment.": Whole programme contributes to food security.</p> <ul style="list-style-type: none"> <li>■ In practice... (Too) many indicators are not specifically tailored towards that specific achievement since the programme is focused on 3rd party transparent and credible certification at Farm level (and market transformation). ASC's Theory of Change and Mission thus focuses more on transforming the industry/food system in order to enable the sustainable/responsible production of farmed seafood. Globally, the entire ASC programme thus aims -- and is designed - to achieve SDG 2.1; but this is why ASC's Indirect Contribution towards SDG 2.1 is greater than it's direct contribution; yet both contributing to the same goal.</li> <li>■ Furthermore, the production of farmed seafood certainly contributes to the "healthy and nutritious" food dimension too. This represents a big indirect impact; with the nutritious benefits of seafood (Omega-3s, Vitamin D etc.) being well documented in SOFIA 2022 report.</li> <li>■ See the ASC Impacts Dashboard to provide metrics re. volumes of ASC-certified seafood and number of ASC-labelled products.</li> </ul>	1	1	2
2.3	<ul style="list-style-type: none"> <li>■ The ASC Improver programme (ASC IP) - and the Group Certification scheme - aim among others to improve (responsible farming, thus incl. economic) conditions of small-holder aquaculture farmers. Several of the ASC's "social" criteria/indicators/requirements are aimed at ensuring that local communities benefit from farm's operations, retain access to resources.</li> <li>■ The ASC programme is also aimed at enabling small-scale seafood producers to access ASC Certification (via e.g. the Group Certification methodology launched in April 2019: <a href="https://www.asc-aqua.org/news/latest-news/new-group-certification-to-make-it-more-accessible-for-small-producers-to-apply-for-asc-certification/">https://www.asc-aqua.org/news/latest-news/new-group-certification-to-make-it-more-accessible-for-small-producers-to-apply-for-asc-certification/</a>) and/or via the ASC's Improver programme, a pre-competitive approach to improvement (<a href="https://www.asc-aqua.org/what-we-do/programme-improvements/improver-programme/">https://www.asc-aqua.org/what-we-do/programme-improvements/improver-programme/</a>)</li> <li>■ Key points on ASC IP are: Credible AIPs, supported by trained and qualified local implementers and third-party verification; Fully transparent and public reporting; Drive scale through collaboration with others, including local governments (e.g. VietGAP and IndoGAP benchmarks), FTUSA (1 joint audit for 2 certifications); Innovations are key for ASC's Improver programme as they can bring down the cost of verification and access data. This is key because ASC doesn't want to drive further costs onto producers who are not even certified. ASC have piloted tech solutions with VerifiK8 in Vietnam (farm app, supported by ISEAL) and SeaWarden in Indonesia (satellite monitoring, also under ISEAL) to enhance data accessibility, support informed decision making around risk management, and help prep farmers for certification audits; For the current AIP in Indonesia we are looking to include for tech innovation from JALA (farm management app, running disease diagnostics) and are discussing also with XpertSea (health diagnostics, biomass estimation) to optimize performance and reduce risk at scale in AIPs.</li> <li>■ The Mangrove project (via Socio Manglar, a conservation incentives programme implemented by Ecuador's government, which oversees the funds from the Coastal Habitat Stewardship Fund: a partnership between the ASC, Conservation International and the Ecuadorian government's Ministry of Environment) where local associations are given regular economic incentives as well as access to mangrove areas in return for voluntarily committing to Sustainable Use and Stewardship Agreements to protect and maintain mangrove areas.</li> <li>■ Re. Incomes, the ASC is a member of the Global Living Wage Coalition (GLWC) and thus shares the GLWC Vision that "Workers around the world can afford a decent life for themselves and their families." All of the ASC standards are embedded with requirements re. 'Payment of fair and decent wages' to the Farm's workforce.</li> <li>■ Furthermore, all the ASC standards include community engagement, and demand respect of indigenous peoples' rights and protocol agreements.</li> </ul>	2	1	3

2.4	<p>Whole programme -- directly and indirectly -- works towards sustainable food production systems/SDG 2.1, and protecting mangroves and other natural habitats in coastal regions increases resiliency to extreme climatic events. + Work on mangroves reduces their exposure; (e.g. Shrimp 3.1 - impacts on communities).</p> <p>■ There are too many indicators/requirements to cite here, but the entire ASC Certification programme holistically ensures the sustainable and responsible production of farmed seafood. As an increasing proportion of the global aquaculture industry (market Transformation/Theory of Change) meets ASC standards, so will the proportion of aqua -- and agri -- cultural area under productive and sustainable agri/aquaculture increase. NB: Whilst the origin and sustainability of non-marine feed ingredients is already addressed by various indicators in the existing 11 ASC species standards. The ASC Feed standards also further addresses issues re. terrestrial/agri-ingredients; including 'in' the feedmill/feed producers 'supply chain', risk-based due diligence etc.</p> <p>■ Re. ASC Species-standards ; See... [assessing Biodiversity impacts] Ab 2.1.1, 2.2.4; Bi 2.1.5, 2.3.1, 2.4.1; FF 2.3.10; Tr 2.1.3; Pa 2.2.4; Sa 2.4.1; SSM 2.3.1; SC 2.3.1; Sh 2.1.1; Ti 2.1.1; TMFF 2.3.1</p> <p>■ See also the rationale for SDG 1.5.</p> <p>■ See also Feed ingredients Sourcing requirements re. soy and RTRS; both within the species and Feed standards.</p> <p>■ All Species-standards include requirements re. "Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems..."</p>	3	1.5	4.5
2.5	<p>Principle re. 'Conserving Natural Habitat and Local Biodiversity' (e.g. P2 for Salmon) - notably re. Escapes and Exotic/Non-native species requirements. Much of the ASC programme contributes to SDG 2.5 directly and very strongly so.</p> <p>■ NB: There is an Interlinkage here between SDG 2.5 and SDG 15.8 re. invasive species (and Salmon 4.1.2; Pangasius 4.1.1-4.1.3; Shrimp 6.1.1 etc.). For instance, ASC standards have Criteria/indicators and requirements re. farmed fish/shellfish 'Escapes'. Escapes may be the result of poor or compromised structural integrity of the culture system, human errors or unforeseen events. Escapes present not only economic loss to the producer, but also pose ecological, pathogenic and genetic risk to local wildlife populations and ecosystems and should, therefore, be minimised as much as possible. The (rationale for the) ban on the farming of Transgenics species (in all ASC standards) is also an expression of the Precautionary Principle regarding biodiversity and genetic diversity in the event where such GM/GMO animals should escape from the production facilities.</p> <p>■ Re. ASC Species-standards ; See... [Sustainability of terrestrial feed ingredients] Ab 5.1.1; FF [4.4.1-4.4.3] ; Tr [5.4.1-5.4.4]; Pa 5.1.8; Sa [4.4.1-4.4.3]; SSM [4.4.1-4.4.3]; SC [4.4.1-4.4.3]; Sh 7.2.2 and [7.3.1-7.3.4]; Ti 5.2.1; TMFF [4.4.1-4.4.3]</p> <p>■ See also re. "(100%) Percentage of soya or soya-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)" (FF SSM, SC TMFF 4.4.3; Tr 5.4.2, Sa 4.4.2, Sh 7.2.2)</p> <p>■ The Conservation of Natural Habitat, Local Biodiversity and Ecosystem Function constitutes an integral part of all ASC species-standards. This in turn helps protect the local/global genetic diversity of the species farmed and the that of their native/wild congeners. [E.g. Salmon and Trout standards; requirement for a baseline genetic study in certain cases (open net pen systems in region where indigenous salmonids of the same species are being cultivated); escape-related indicators; non-native seeds/juveniles/species etc. ]</p> <p>■ See also all the Feed Standard / specific P2 criteria and indicators. etc..</p>	3	0.5	3.5
2.A	Whole programme contributes here -- albeit (very) indirectly and/or via championing sustainable/responsible seafood financing -- via the growth of a responsible and sustainable aquaculture industry.	1	0.5	1.5
2.B	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "			
2.C	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "			
SDG 2	<b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	12 + 6 = 18 / 6 = SDG score of 3		

SDG 3	SDG 3: Ensure healthy lives and promote well-being for all at all ages	ASC SDG 3 Overall Contribution score = 1.6		
3.1	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "			
3.2	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "			
3.3	<p>Arguably a small (but not insignificant) claim to addressing SDG3.3 can be made via 'combatting [some; those related to "water pollution" via ASC's work on waste disposal and provision of potable water] water-borne' disease.</p> <ul style="list-style-type: none"> <li>■ See also ASC indicators re. workers' access to potable water, clean sanitary facilities and clean and hygienic place to prepare food could contribute etc. See (Draft) Farm Standard 3.5.11 and Feed Standard 1.7.10 "The UoC shall provide access to free, clearly labelled, potable water for all employees."</li> <li>■ All species standards (except Ab, Bi) have requirements re. "[No] Allowance for prophylactic use of antimicrobial treatments." and many limit (metric performance level) the use of antibiotics ("Number of treatments of antibiotics over the most recent production cycle") and furthermore the Salmon Standard requires an improvement (decrease 'of at least 15%') re. the antibiotic load ("If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load is at least 15% less that of the average of the two previous production cycles." (Sa 5.2.14)</li> <li>■ See also ASC indicators re. fight against antimicrobial resistance (AMR) / via "No allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO)" requirements (FF5.2.1; Tr 4.2.6; Pa 6.2.5; Sa 5.2.12; SSM 5.2.1; SC 5.2.1; Sh 5.3.2; Ti 6.2.6; TMFF 5.2.1)</li> <li>■ See "No Allowance for use of antibiotic and medicated feed on [E.g. ASC]-labeled products." (Sh 5.3.1)</li> <li>■ See the indicators re. "No Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned in any of the primary producing or importing countries. "</li> </ul>	1	0.5	1.5
3.4	<ul style="list-style-type: none"> <li>■ Furthermore, the production of farmed seafood certainly contributes to the "healthy and nutritious" food dimension too. This represents a big indirect impact; with the nutritious benefits of seafood (Omega-3s, Vitamin D etc.) being well documented in SOFIA 2022 report. These are attributes inherent to seafood in general. Also re. mental health...</li> <li>■ Indirect contribution (but ASC Vision is in direct alignment)</li> </ul>	0	1	1
3.5	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "			
3.6	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "			
3.7	<ul style="list-style-type: none"> <li>■ This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "</li> <li>■ indirect: ASC could/does contribute to this re. ["universal health coverage" within ASC Farms]? However, this is very peripheral/indirect</li> </ul>			



3.8	<p>ASC contributes to this re. ["universal health coverage" within ASC Farms] Health and Safety assessment, health provisions for workers, incl. divers on farms etc...</p> <ul style="list-style-type: none"> <li>■ Re. ASC Species-standards ; See... [proof of insurance (accident or injury) for 100% of worker, incl. divers] Ab 7.4.3; Bi 7.4.3; FF 6.5.5, 6.5.6; Tr 6.5.5; Pa 7.4.4; Sa 6.5.5, 6.5.6; SSM 6.5.5, 6.5.6; SC 6.4.4; Sh 4.4.3; Ti 7.4.3; TMFF 6.5.5, 6.5.6</li> <li>■ Link/multiply this contribution to ASC's impact/footprint (see Dashboard), number of employees/staff and subcontractors of ASC-certified farms worldwide</li> </ul>	1	0	1
3.9	<p>ASC contributes directly with the work on hazardous chemicals, safe working conditions at the farms, etc.</p> <ul style="list-style-type: none"> <li>■ Shrimp 4.4 and Salmon 6.5 - Work environment health and safety; Shrimp 3.1 - reducing risk to community. + other standards' requirements and notably (all standards) mention the antibiotics usage restrictions or ban, incl. combatting the potential rise of AntiMicrobial Resistance (AMR) globally (ban of all antibiotics listed by WHO as critically important to human health). The latter is a very strong ASC differentor/Benefit / linked to 'healthy' VP.</li> <li>■ Many criteria/indicators in the ASC standards are aimed at minimising the negative water quality impacts on or near farms; and thus contribute positively to the health of the ecosystem and of the humans relying on it. Furthmore, all standards demand "Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts" under Principle 1 [Legal compliance].</li> <li>■ Re. ASC Species-standards ; See... [No allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO)] Ab; Bi; FF5.2.1; Tr 4.2.6; Pa 6.2.5; Sa 5.2.12; SSM 5.2.1; SC 5.2.1; Sh 5.3.2; Ti 6.2.6; TMFF 5.2.1 + many other related indicators/requirements.</li> <li>■ NB re. Critical Antibiotics: interlinkage with SDG 3.d / 3.d.1 indicator and to address the challenge of preventing a potential AntiMicrobial Resistance (AMR) crisis.</li> <li>■ Furthermore, the multi-stakeholder dimension of all the ASC standards includes a requirement that there be 'Presence and evidence of an effective policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations.' This is a mechanism which can be used by local communities to adress issues related to air pollution; should this become a problem due to the Farm's operations. A similar type of requirement will also likely be included in the forthcoming Feed Standard; as well as requiring an effective Environment Mangagment System (EMS) to mitigate any negative environmental (leading to human health...) impacts.</li> <li>■ See also Pangasius Standard, indicators 3.5.3 requirement "Evidence that chemical and medicine wastes is not being discharged into the natural environment".</li> </ul>	2	1	3
3.A	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "			0
3.B	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "			0
3.C	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "			0
3.D	<p>Whole programme (risk reduction). Inclusion in most ASC standards of the non allowance for "use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO)" (and other indicators re. antibiotics) contributes significantly to addressing ("health emergency preparedness"-wise) the SDG 3.d / 3.d.1 indicator and to address the challenge of preventing a potential AntiMicrobial Resistance (AMR) crisis.</p> <ul style="list-style-type: none"> <li>■ Re. ASC Species-standards ; See... [No allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO)] Ab; Bi; FF5.2.1; Tr 4.2.6; Pa 6.2.5; Sa 5.2.12; SSM 5.2.1; SC 5.2.1; Sh 5.3.2; Ti 6.2.6; TMFF 5.2.1 + many other related indicators/requirements.</li> </ul>	1	0.5	1.5
<b>SDG 3</b>	<b>Calculations</b> (sums of direct and indirect SDG target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	5 + 3 = 8 / 5 = SDG score of 1.6		

SDG 4	SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	ASC SDG 4 Overall Contribution score = 1.25		
4.1	<ul style="list-style-type: none"> <li>■ ASC, by having 'No Child Labour' requirements in all its standards, and by ensuring fair/decent wages for workers/households on farms, potentially directly/indirectly favours and encourages children education; albeit in a non-comprehensive way (direct and indirect contribution). The rationale of banning child labour is also aimed at ensuring that children to free/able attend school.</li> <li>■ Re. ASC Species-standards ; See... [No Child Labour] Ab 7.1.1; Bi 6.2.1; FF 6.2.1, 6.2.2; Tr 7.2.1, 7.2.2; Pa 7.2.1, 7.2.2; Sa 6.2.1,6.2.2; SSM 6.2.1, 6.2.2; SC; Sh 4.1.1; Ti 7.1.1; TMFF 6.2.1, 6.2.2.</li> <li>■ Feed Standard [7 indicators/sets of requirements]: See Criterion 1.5 [1.5.1 - 1.5.7], 1.5.1 states explicitly that "The rationale of banning child labour is also aimed at ensuring that children to free/able attend school."; with Feed 1.5.2 stating "If child labour is found, the UoC shall implement effective remediation procedures to comply with 1.5.1 that put the best interest of the child first, such as enabling the child to attend school and remain in school until no longer mandatory. Remediation actions are documented and are verified to ensure effectiveness."; 1.5.4 stating: "The UoC may employ children as of the age of 15 , or above the age of completion of mandatory schooling ( whichever is higher), to conduct non-hazardous work." and 1.5.7 stating: "The UoC shall encourage, and shall not prevent, children of employees living on-site to attend mandatory schooling."</li> <li>■ ASC (Draft) Farm Standard [11 indicators/sets of requirements]: See Criterion 3.3 [3.3.1 - 3.3.11], Ditto re. 3.3.1, 3.3.2; 3.3.4; 3.3.7 with the addition that 3.3.5 refers specifically to schooling also "The UoC may employ children aged 13 and 14 years old to conduct light work only, but shall make sure that: The child receives appropriate training prior to work; The child receives appropriate supervision; It does not jeopardise schooling."</li> <li>■ Furthermore 3.3.9 also stipulates: "The UoC shall run the Risk Management Framework (RMF) app , carrying out an assessment to understand both the external and internal contexts, including the drivers within those contexts which increase the likelihood of child labour within the UoC. " and 3.3.11 states among others that "The UoC shall, as part of the UoC's site-specific RMP, (developed under 3.3.10), implement measures (prevention) to: • ensure low risk of child labour, • facilitate schooling of children of employees [...]"</li> </ul>	1	0.5	1.5
4.2	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
4.3	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "; ■ NB: Pangasius 7.10.3 "Maximum length of probation period stated in the contract for farm managers and workers with a university degree."			
4.4	ASC standards support (and require) vocational training; including re. "youth and adults" (E.g. Salmon 6.11.1); ASC's contribution could nonetheless be improved here. ■ Re. ASC Species-standards ; See... [Education and training (besides Child schooling, addressed in Child Labour criteria)] Bi 2.4.1; FF 3.3.1; Tr 2.5.1, 2.5.3; Sa 6.11.1; SSM 3.3.1; SC 3.3.1; Sh 5.3.4; TMFF 3.3.1 ■ ASC already tackles some elements of 'education' / skills / training + this will be fine-tuned in the forthcoming ASC-Farm Standard (P3): currently interlinked with the following [Draft; PC V] ASC Farm criteria (indicators): 3.3 (3.3.1; 3.3.2; 3.3.3; 3.3.5); 3.4 (3.4.1); 3.5 (3.5.1; 3.5.2; RMF 3.2.16; RMF 3.5.21	1	0	1
4.5	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
4.6	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
4.7	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
4.A	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
4.B	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
4.C	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
SDG 4	<b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	2 + 0.5 = 2.5 / 2 = SDG score of 1.25		



SDG 5	SDG 5: Achieve gender equality and empower all women and girls	ASC SDG 5 Overall Contribution score = 2		
5.1	<p>ASC's indicators on preventing discrimination have a direct impact here. There is also a direct ripple effect indirect impact in the households and communities where ASC farms operate.</p> <ul style="list-style-type: none"> <li>■ Non-discrimination criteria/indicators/requirements are also embedded in all the ASC standards. Notably, 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."</li> <li>■ See... re. "non-discrimination": all ASC-spp standards require 'Evidence of comprehensive and proactive anti-discrimination policies, procedures and practices' and/or 'zero' incidences of discrimination.</li> <li>■ Furthermore, all standards have requirements re. the "Equality of pay, benefits and promotion opportunities for all workers" indicator/requirement is embedded in ALL the ASC standards.</li> <li>■ Some standards (Seriola and Cobia 6.3.4, Shrimp 4.3.4, 4.8.7) also include an indicator re. 'Number of incidents [must be nil] where employers dismiss a worker on the basis of marital status or pregnancy or deny employee legal rights to pregnancy or where maternity rights and benefits are not respected'.</li> <li>■ Ditto re. "Respect of maternity rights and benefits." and "Rights to maternity leave, including daily breaks or a reduction of hours of work to address child care needs." requirements.</li> <li>■ See also, embedded in most ASC standards, and in the Feed/(draft) Farm standards, requirements re. "Existence of separate sanitary and toilet facilities for men and women (with the exception of work sites with fewer than 10 employees or where married couples are working and accommodated together)"</li> <li>■ ASC funds/sponsors the "Women in Ocean Seafood" programme of the 'HATCH' NGO; and would like to develop various other projects; e.g. on gender equality.</li> </ul>	2	0	2
5.2	<p>Disciplinary practice indicators and providing a safe working environment embedded in all ASC standards mean that ASC can make strong and direct claims here</p> <ul style="list-style-type: none"> <li>■ E.g., Salmon 6.3 and Shrimp 4.2 - forced, bonded labour; Salmon 6.9 and Shrimp 4.7 - disciplinary practices and harrasment.</li> <li>■ All ASC standards have social/labour/working condition criteria/indicators/requirements aimed at protecting "labour rights and promote safe and secure working environments for all workers, including migrant workers and women.</li> <li>■ Non-discrimination criteria/indicators/requirements are also embedded in all the ASC standards (see above). Notably, the ASC highlights that "Discrimination occurs in many work environments and takes many forms. A common form is discrimination against women workers." and notes that "... "Positive" discrimination (i.e., special treatment to protect the rights and health of particular groups of workers, or to provide opportunities for groups which have historically been disadvantaged) is allowed, and often required by laws related to such issues as maternity and affirmative action."</li> <li>■ ASC funds/sponsors the "Women in Ocean Seafood" programme of the 'HATCH' NGO; and would like to develop various other projects; e.g. on gender equality.</li> </ul>	2	0	2
5.3	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
5.4	<p>Notwithstanding the notes below, This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";</p> <p>See ASC requirement re. non-discrimination (All ASC standards include fair wages and non-discrimination in employment): The non-discrimination indicators open up employment outside the home for women, potentially (though not necessarily, reducing their time spent on unpaid work.</p> <ul style="list-style-type: none"> <li>■ the ASC's notes in some of its standards (re. Non-discrimination criteria/indicators/requirements) that "... "Positive" discrimination (i.e., special treatment to protect the rights and health of particular groups of workers, or to provide opportunities for groups which have historically been disadvantaged) is allowed, and often required by laws related to such issues as maternity and affirmative action."</li> </ul>			
5.5	ASC's set of non-discriminatory requirements (see above ASC substantiations re. SDG 5.1 and SDG 5.2: Strong interlinkage with.), and the farm's staff training associated with those policies, contribute here; albeit in a fashion which could be improved (hence poor rating); See also e.g. Salmon 7.1 - community engagement + other standards' requirements	1	1	2
5.6	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
5.A	Within the scope of its wording, this SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
5.B	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
5.C	<p>ASC contributes via the growth and its advocacy of its programme , [including the ASC's Improver programme (IP), and of all the social criteria/requirements incl. non-discrimination], by championing Responsible Aquaculture and its adoption at country/regional level in various regions of the globe (Asia, Indonesia, Korea re. Seaweed etc.). ASC is a supporter of the HATCH initiative, 'Women in Ocean Food Innovation Studio', and also of WSI, the international organisation for women in the seafood industry.</p> <ul style="list-style-type: none"> <li>■ See also substantiations for SDG 5.1; 5.2 and 5.5 above.</li> </ul>	2	0	2
SDG 5	Calculations (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	7 + 1 = 8 / 4 = SDG score of 2		

SDG 6	SDG 6: Ensure availability and sustainable management of water and sanitation for all	ASC SDG 6 Overall Contribution score = 3.2		
6.1	<p>See Provision of potable water for workers. Also the restrictions on waste, etc. No extra indirect impact.</p> <ul style="list-style-type: none"> <li>■ See also ASC indicators re. workers' access to potable water, clean sanitary facilities and clean and hygienic place to prepare food could contribute etc (Shrimp 4.11 - farm workers living conditions and Flatfish, Seabass/Seabream, Seriola/Cobia and Tropical Marine Finfish: 6.11.1).</li> <li>■ See (Draft) ASC Farm Standard 3.5.11 and Feed Standard 1.7.10 "The UoC shall provide access to free, clearly labelled, potable water for all employees."</li> <li>■ Furthermore, all ASC standards require "Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts" and under Principle 1 [Legal compliance].</li> <li>■ "Farm employees accommodated on the farm have access to clean, sanitary, safe and suitable living conditions"</li> <li>■ The Pangasius Standard demands (3.5.1) "Evidence that farm's solid wastes is not being discharged into the natural environment"</li> <li>■ Interlinkage with SDG 3.3</li> </ul>	3	0	3
6.2	<p>Many of the criteria/indicators/requirements embedded in various standards' Principles. The ASC programme contributes to target SDG 6.2 directly, and very strongly so (No extra indirect impact).</p> <ul style="list-style-type: none"> <li>■ See Provision of sanitary facilities for workers (including gender separated facilities)</li> <li>■ Shrimp 4.11 - farm workers living conditions and 6.11.1 of the Flatfish, Seabass/Seabream, Seriola/Cobia and Tropical Marine Finfish standards. See above for SDG 6.1 and interlinkage with SDG 3.3.</li> <li>■ Pangasius 3.5.2: "Evidence that human and animal solid wastes is not being discharged into the natural environment"</li> <li>■ See (Draft) Farm Standard 1.7.9 and current Feed Standard also: "The UoC shall provide access to adequate and clean sanitary facilities, with adequate privacy, which includes separation by gender if required."</li> </ul>	3	0	3
6.3	<p>Very many criteria and indicators throughout all ASC standards, too many to list exhaustively: E.g. Salmon P4 and Shrimp P7 - Use Resources in an Environmentally Efficient and Responsible Manner; Salmon 4.5 and Shrimp 7.7 and 5.3.6 - waste disposal; Salmon 2.2 - water quality; Salmon 2.3 - nutrient release + other standards' requirements. The Whole ASC programme contributes to target 6.3 directly and indirectly, and very strongly so. Strong interlinkage with SDG 6.6. Most/all ASC standards have criteria/indicators re. :</p> <ul style="list-style-type: none"> <li>■ "Presence of documents demonstrating compliance with local and national regulations and requirements on land and water use,"</li> <li>■ "Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts"</li> <li>■ "Presence and evidence of a functioning policy for proper and responsible treatment of non-biological waste from production (e.g., disposal and recycling)."</li> <li>■ "Demonstration that a farmer is aware of recycling facilities that are accessible to the farm and evidence that these facilities are used";</li> <li>■ "Compliance with local and national regulations on water use and discharge, specifically providing permits related to water quality";</li> <li>■ "Safe storage and handling/disposal of chemicals and hazardous/hydrocarbon materials";</li> <li>■ "Spill prevention and response plan for chemicals/hydrocarbons originating from farming operations";</li> <li>■ "Evidence that sludge is not discharged directly into receiving waters or natural ecosystems";</li> <li>■ "Evidence that chemical and medicine wastes is not being discharged into the natural environment" (Pangasius 3.5.3); and/or "Evidence that all chemicals used on the farm that are discharged to effluent are recorded and quantified" (Abalone 2.4.3, Flatfish 2.2.5)</li> <li>■ "Evidence of proper disposal of biological waste" (Abalone 2.6.1; Flatfish 4.5.2; Pangasius 3.5.4; Seabass and Seabream 4.5.2; Shrimp 7.7.2; Tropical Marine Finfish 4.5.2);</li> <li>■ "For farms that use copper-treated nets, evidence that nets are not cleaned or treated in situ in the marine environment." (Salmon 4.7.1);</li> <li>■ "Evidence of implementation of biosolids (sludge) Best Management Practices (BMPs)" (Salmon 8.29)</li> <li>■ "Water-quality monitoring matrix completed and submitted to ASC" (Freshwater Trout 3.2.5; 3.3.3);</li> <li>■ "No allowance for discharging saline waters in natural freshwater bodies" (Flatfish 2.6.3; Shrimp 2.5.1; Tropical Marine Finfish 2.6.3);</li> <li>■ "Evidence that human and animal solid wastes is not being discharged into the natural environment" (Pangasius 3.5.2)</li> <li>■ Etc... + requirements re. Biological Oxygen Demand, Dissolved Oxygen, Nitrogen, Phosphates, Turbidity, Chlorophyll concentration,</li> </ul>	3	1	4

6.4	<p>Salmon P2 - Conserve Natural Habitat, Local Biodiversity and Ecosystem Function; Shrimp P2 - Site Farms 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 various (and forthcoming - Alignment?) standards highlight the importance of conserving (and good quality of) freshwater resources: Abalone 5.5.1, Shrimp 2.5.2, Freshwater Trout 3.1.1, Trout and Pangasius 3.1.3; 2.4.1, Pangasius 2.4.2.</p> <p>Several ASC standards require measurement of water used (intent may be in future revisions to set improvement goals):</p> <ul style="list-style-type: none"> <li>■ Abalone 5.5.1: "Records of reticulated freshwater used on farm: Yes" with the Rationale of 5.5 recommending "that growers improve efficiency and reduce consumption of reticulated freshwater".</li> <li>■ Shrimp Standard (2.5.2) bans ("No Allowance") the use of fresh groundwater in ponds; or...</li> <li>■ Freshwater Trout Standard (3.1.1) sets "Maximum amount of water that a farm can divert from a natural flowing water body (such as a river or stream)"; and/or</li> <li>■ 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 Trout 3.1.2: "Demonstration that &gt;90% diverted water is returned to the natural water body"</li> <li>■ 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"</li> <li>■ Going forward, the ASC Farm Standard will significantly increase ASC's SDG 6.4 performance with the implementation of the Criterion 2.10's 7 indicators.</li> </ul>	2	1	3
6.5	<p>Whilst the SDG target is not intuitively entirely 'within ASC scope' (notably re 'transboundary cooperation' but the latter is not the sole focus of this target), 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 Salmon (3.1.1) to participate in an Area-Based Management scheme. 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 re the water quality of effluents and receiving water bodies in Criterion 1.2. BUT all are at Farm level (none are aimed at 'integrated' scale:beyond UoC), with perhaps the exception of the Salmon (3.1.1) and Seriola/Cobia (5.1.1) standard's Area Based Management (ABM)</p> <ul style="list-style-type: none"> <li>■ Going forward, the ASC Farm Standard will significantly increase ASC's SDG 6.4 performance with the implementation of the Criterion 2.10's 7 indicators; including via the ASC Risk Management Framework (RMF) and the iteration of a site-specific Risk Management Plan (RMP) for freshwater use (2.10.5 and 2.10.6)</li> </ul>	1	1	2
6.6	<p>All ASC standards are specifically designed to certify responsible aquaculture which effectively and demonstrably/transparently "protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes"; i.e. all neighbouring aquatic and non-aquatic environment, and also the ecosystems/biodiversity and environments from which feed ingredients are sourced (marine and terrestrial ingredient requirements in each standards; and extensively developed in Feed Standard).</p> <ul style="list-style-type: none"> <li>■ For instance (one of many examples) ASC has various requirements aimed at protecting critical (incl. wetland) habitats, including mangroves; and critically endangered/Red listed species. Mangrove protection, conservation and restoration are part of ASC's drive to protect biodiversity, 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. [E.g. 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] and via Biodiversity impact assessments (EIA etc.) in See Salmon 2.4.1; Shrimp 2.1.1; Abalone 2.1.1 / 2.2.4 and Bivalves 2.3.1/ 2.4.1; TMF 2.3.1 etc. Many more example also...</li> <li>■ The Mangrove project (via Socio Manglar, a conservation incentives programme implemented by Ecuador's government, which oversees the funds from the Coastal Habitat Stewardship Fund: a partnership between the ASC, Conservation International and the Ecuadorian government's Ministry of Environment) where local associations are given regular economic incentives as well as access to mangrove areas in return for voluntarily committing to Sustainable Use and Stewardship Agreements to protect and maintain mangrove areas.</li> <li>■ See also (in all standards) requirements re. "Presence of documents demonstrating compliance with local and national regulations and requirements on land and water use" and "Spill prevention and response plan for chemicals/hydrocarbons originating from farming operations" requirements, etc.</li> <li>■ "Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts"</li> <li>■ See also "Safe storage and handling/disposal of chemicals and hazardous/hydrocarbon materials" and</li> <li>■ Strong interlinkage with SDG 6.3; see the ASC substantiations there too.</li> </ul>	3	1	4
6.A	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
6.B	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "; An argument could however be made for this indicator to eventually be made within ASC's "sphere of influence" scope.			
SDG 6	<b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	15 + 4 = 19 / 6 = SDG score of 3.2		

SDG 7	SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all	ASC SDG 7 Overall Contribution score = 2		
7.1	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
7.2	<p>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 . Going forward with the new Standard, ASC has 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.</p> <p>The ASC understands that education and awareness is a key part in 'combatting' and addressing the climate change challenges. It thus requires from all certified farms that they take an 'monitor and measure' approach as a first step to provide data to build understanding re. their various impacts. This includes energy use and greenhouse gas (GHG) emissions. All ASC standards (excepted 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". The ASC programme contributes to target SDG 7.2 directly, and rather strongly so. See ASC 's beyond certification advocacy and work towards awareness of Climate Change mitigation via adoption by industry of GHG Calculator tool. (See <a href="https://www.asc-aqua.org/how-were-helping-aquaculture-lead-by-example-on-climate-change/">https://www.asc-aqua.org/how-were-helping-aquaculture-lead-by-example-on-climate-change/</a>)</p> <ul style="list-style-type: none"> <li>■ See Bivalve 5.2.1; Flatfish 4.6.4, Seabass and Seabream 4.6.4; TMFF 4.6.4 re. "Evidence of a documented strategy to reduce GHG per unit of production (measured in kilojoule/mt of change in fish biomass)"</li> <li>■ See (Draft) Farm Standard Criterion 2.11 "Energy Use and Greenhous Gas Emissions" which will broaden the energy and GHGe monitoring to all species AND will 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. The Criterion 2.11 will also see the Establishment of on-farm energy use thresholds to trigger the EEMP process</li> <li>■ Under 2.11.3: [...] "c) The UoC 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) 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).</li> <li>■ This is also a requirement for Feed: "Documentation of GHG emissions of the feed used during the previous production cycle" (FF, Sa, SSM, TMFF 4.6.3); Feed Standard Crierion 1.21 "The UoC uses energy responsible and monitors Greenhouse Gases (GHG) emissions.</li> <li>■ Also, and at a more national/international level, ASC actively participates at EU level in LCA/Product Environmental Footprint (PEF) - Marine Fish scientific debate and definitions - which include climate change measures.</li> <li>■ Strong interlinkage between SDG 7.2 and 7.3. See their respective ASC substantiations.</li> </ul>	2	0	2
7.3	<p>Almost all of ASC's species standards include requirements for farms to calculate and track their energy consumption. The bivalve standard goes a bit further and requires upkeep of equipment to manage energy efficiency. This collection of data and, in some cases, reporting of energy use data to ASC, is a valuable resource for better understanding the relative energy reliance of diverse aquaculture systems, and ASC is currently analyzing those data in order to better understand this aspect of sustainability, with plans to publish and help fill gaps in the literature for some species and production methods. The ASC thus encourages companies to integrate energy use assessments and GHG accounting into their policies and procedures across the board in the company; and recognises the importance of efficient and sustainable energy use. The ASC programme contributes to target SDG 7.3 directly, and rather strongly so.</p> <ul style="list-style-type: none"> <li>■ See Salmon 4.6 and Shrimp 7.6 - energy efficiency; NB: Actively working on this (Alignment, Feed, future revisions)...</li> <li>■ Excerpted from the Salmon Standard's Crierion 4.6 '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."</li> <li>■ "Annual Cumulative Energy Demand (CED) in mega joules/ton of [shell]fish produced over a 12- month period" - Shrimp 7.6.2</li> <li>■ Going forward, the ASC will have come 'a long way' (via Alignment) "by 2030" towards fine-tuning 'Energy/GHGe and #CarbonFootprint' requirement in standard(s) and ensuring they will have (from now) doubled their energy efficiency (if not a lot more...).. All ASC standards (excepted 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".</li> <li>■ See (Draft) Farm Standard Criterion 2.11 "Energy Use and Greenhous Gas Emissions" which will broaden the energy and GHGe monitoring to all species AND will 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. The Criterion 2.11 will also see the Establishment of on-farm energy use thresholds to trigger the EEMP process</li> <li>■ Under 2.11.3: [...] "c) The UoC 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) 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).</li> <li>■ Strong interlinkage between SDG 7.2 and 7.3. See their respective ASC substantiations.</li> </ul>	2	0	2
7.A	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
7.B	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
SDG 7	<b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	4 + 0 = 4 / 2 = SDG score of 2		

SDG 8	SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	ASC SDG 8 Overall Contribution score = 2.8		
8.1	<p>As above (see SDG 8.1) 7 likewise: Whole programme contributes to economic productivity. This is within ASC 'sphere of influence' scope despite the '7%' metric is not necessarily directly adapted/aligned with ASC's Mission.</p> <ul style="list-style-type: none"> <li>■ The ASC programme is designed to help deliver social responsibility and environmental sustainability; and these are closely intertwined with farm's viability / "economic sustainability". Furthermore, by "... transform[ing] aquaculture towards environmental sustainability and social responsibility using efficient market mechanisms that create value across the chain" [ASC Mission], the ASC programme helps creating various 'values' across the seafood chain; some of which can indeed translate in economic/employment / GDP growth terms.</li> <li>■ 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.</li> </ul>	1	0.5	1.5
8.2	<p>Whole programme - via the 3 pillars (social, economic and environmental) of sustainability contributes to economic growth in global Aquaculture. This is within ASC 'sphere of influence' scope despite the 'the alignment with ASC's work/programme not being straight-forward.</p> <ul style="list-style-type: none"> <li>■ The ASC programme is designed to help deliver social responsibility and environmental sustainability; and these are closely intertwined with farm's viability / "economic sustainability". Furthermore, by "... transform[ing] aquaculture towards environmental sustainability and social responsibility using efficient market mechanisms that create value across the chain" [ASC Mission], the ASC programme helps creating various 'values' across the seafood chain; some of which can indeed translate in economic/employment / GDP growth terms.</li> <li>■ Potential future contribution (depending on outcome of current Shrimp Review, and addition of freshwater prawn and crayfish Spp to scope of Shrimp Standard): Malaysia has increased the culture of Freshwater Giant Prawn (<i>Macrobrachium</i> spp) "something which is considered to have the potential to raise income among impoverished farmers" (Rubia Banu et al., 2016). If this is indeed the case, and under the aegis of the ASC programme, ASC can hence further contribute to this SDG.</li> </ul>	1	0.5	1.5
8.3	<p>ASC aligns rather strongly, including via Group Certification and ASC's IP (ASC IP, AIP); ASC programme contributes to target 8.3 directly and indirectly, and very strongly so.</p> <ul style="list-style-type: none"> <li>■ Re. Incomes and Living Wages, the ASC is a member of the Global Living Wage Coalition (GLWC) and thus shares the GLWC Vision that "Workers around the world can afford a decent life for themselves and their families." Together with other GLWC member organisations, ASC is working to understand the gap between the prevailing wage and a living wage. Together we are applying the Global Living Wage Coalition benchmarks to work towards achieving living wages for employees in all production systems across the world.</li> <li>■ ASC is (indirectly) encouraging creation micro and small firms to collaborate via its Group Certification scheme, ASC IP and as the ripple effect of other outreach work.</li> <li>■ All of the ASC standards are embedded with requirements re. 'Payment of fair and decent wages' to the Farm's workforce.</li> <li>■ Re. "decent job creation" see also all the indicators relating to 'no abuse of working hours, e.g. Salmon 6.10.1 and in all other standards + many other related indicators/requirements. Etc..</li> <li>■ The ASC Improver programme (ASC IP) - and the Group Certification scheme - aim among others to improve (responsible farming, thus incl. economic) conditions of small-holder aquaculture farmers. Several of the ASC's "social" criteria/indicators/requirements are aimed at ensuring that local communities benefit from farm's operations, retain access to resources.</li> <li>■ The ASC programme is also aimed at enabling small-scale seafood producers to access ASC Certification (via e.g. the Group Certification methodology launched in April 2019: <a href="https://www.asc-aqua.org/news/latest-news/new-group-certification-to-make-it-more-accessible-for-small-producers-to-apply-for-asc-certification/">https://www.asc-aqua.org/news/latest-news/new-group-certification-to-make-it-more-accessible-for-small-producers-to-apply-for-asc-certification/</a>) and/or via the ASC's Improver programme, a pre-competitive approach to improvement (<a href="https://www.asc-aqua.org/what-we-do/programme-improvements/improver-programme/">https://www.asc-aqua.org/what-we-do/programme-improvements/improver-programme/</a>)</li> </ul>	2	1	3
8.4	<p>Whole programme - sustainable production and consumption. All the ASC standards are by design aimed at improving "global [marine and terrestrial [e.g. Feed ingredients] resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation". The ASC programme contributes to target 8.4 directly and indirectly, and very strongly so.</p> <ul style="list-style-type: none"> <li>■ See P4 (or P5) - Use Resources in an Environmentally Efficient and Responsible Manner re. FFDRs / FCRs etc. (e.g. Salmon 4.2.1 and 4.2.2)</li> <li>■ See also Feed Standard, big contribution there throughout the entire Feed ingredient supply chain (responsible sourcing)! + many (too many to quote: dozens) other related indicators/requirements</li> <li>■ ASC contributes both directly and also Indirectly, by promoting responsible farmed seafood consumption and 'educating' public and stakeholders via Consumer campaigns in various countries (e.g. Semaine du Poisson Responsable in France etc., ditto in Germany, Netherlands, Australia etc.) and workmuch advocacy work by the Outreach/Market Development Teams (MDT), this benefits awareness and 'sustainability' consciousness etc.</li> </ul>	3	1	4

8.5	<p>ASC makes social requirements a central part of its certification programme ; with many requirements re. protecting the health, safety, labour and human rights of employees on ASC-certified farms... ASC is currently exploring new and innovative ideas of adding value in the social space around the sustainable aquaculture industry. The ASC programme contributes to target 8.5 directly and indirectly, and rather strongly so.</p> <ul style="list-style-type: none"> <li>■ Whole ASC programme and its many social/labour (ILO Conventions aligned) and human rights indicator/requirements.</li> <li>■ E.g. Salmon 6.4 and Shrimp 4.3 - non-discrimination; Salmon 6.6 and Shrimp 4.5 - wages; Shrimp 3.3 - transparency in employment opportunities. The "Equality of pay, benefits and promotion opportunities for all workers" indicator/requirement is embedded in all the ASC standards. Non-discrimination criteria/indicators/requirements are also embedded in all the ASC standards.</li> <li>■ Re. "decent work for all of equal value" see also all the indicators relating to 'no abuse of working hours, e.g. Salmon 6.10.1 and in all other standards.</li> <li>■ ASC and its Social Team is currently working on developing Workers' Voice and Grievance Mechanisms, which further strengthen their commitment to SDG 8.</li> <li>■ Re. ASC Species-standards ; See... [Fair and decent wages] Ab7.5.1; Bi 7.5.1; FF [6.6.1-6.6.3]; Tr 6.5.1, 6.5.2; Pa [7.9.1-7.9.3]; Sa [6.6.1-6.6.3]; SSM [6.6.1-6.6.3], 6.9.2; SC [6.5.1-6.5.3]; Sh [4.5.1-4.5.4]; Ti 7.5.1; TMFF [6.6.1-6.6.3];</li> </ul>	2	0.5	2.5
8.6	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
8.7	<p>Much of the ASC programme contributes to SDG 8.8 directly and indirectly, and very strongly so.</p> <ul style="list-style-type: none"> <li>■ E.g. Salmon 6.2 and Shrimp 4.1 - child labour; Salmon 6.3 and Shrimp 4.2 - forced labour. All ASC standards have criteria/indicators/requirements preventing/banning [Zero tolerance for] "incidence of forced, bonded or compulsory labor" and "Child labour", and aiming to protect 100% of young workers. Also, indirectly, by advocating and creating awareness in Partners/retailers, ASC also indirectly contributes to making those partners aware that these issues need addressing.</li> <li>■ Re. ASC Species-standards ; See [Forced, bonded or compulsory/ slave labour]... Ab 7.2.1; Bi 7.2.1; FF 6.3.1; Tr 6.2.1; Pa 7.3.1; Sa 6.3.1; SSM 6.3.1; SC; Sh 4.2.3; Ti 7.2.1; TMFF 6.3.1</li> <li>■ Strong interlinkage between SDG 8.7 and 8.8; See the respective ASC substantiations.</li> <li>■ See also the new CAR (v2.3)'s relevance: On 14th July 2022, ASC released revised Certification and Accreditation requirements (CAR) and Certification requirements for Unit of Certification (RUoC) for the ASC Farm standards , and new (v1.0) CAR and RUoC documents for the Feed Standard. These four documents are important in helping ASC to operationalise the standards and define the processes necessary to audit against them. The revised CAR reinforces to CABs that companies carrying out fraudulent activities confirmed by a statutory authority and those involved in child labour, slavery, human trafficking or forced labour are not eligible to hold ASC certification.</li> </ul>	3	0.5	3.5
8.8	<p>Much of the ASC programme contributes to SDG 8.8 directly and indirectly, and very strongly so. All ASC standards have social/labour/working condition criteria/indicators/requirements aimed at protecting "labour rights and promote safe and secure working environments for all workers, including migrant workers and women.</p> <ul style="list-style-type: none"> <li>■ Re. ASC Species-standards [Freedom of association and collective bargaining] see Ab 7.6.1; Bi 7.6.1; FF [6.1.1-6.1.3], 6.4.1; Tr 6.6.1, 6.3.1; Pa 7.5.1, 7.6.1; Sa [6.1.1-6.1.3], 6.4.1; SSM [6.1.1-6.1.3], 6.4.1; SC 6.6.1, 6.6.2; Sh 4.6.1, 4.6.2; Ti 7.6.1; TMFF [6.1.1-6.1.3], 6.4.1. ■ Re. ASC Species-standards [Fair and decent wages] see Ab 7.5.1; Bi 7.5.1; FF [6.6.1-6.6.3]; Tr 6.5.1, 6.5.2; Pa [7.9.1-7.9.3]; Sa [6.6.1-6.6.3]; SSM [6.6.1-6.6.3], 6.9.2; SC [6.5.1-6.5.3]; Sh [4.5.1-4.5.4]; Ti 7.5.1; TMFF [6.6.1-6.6.3];</li> <li>■ Re. ASC Species-standards [Discrimination] see Ab 7.3.1; Bi 7.3.1; FF 6.4.1, 6.4.2; Tr 6.3.1, 6.3.2; Pa 7.6.1; Sa 6.4.1, 6.4.2; SSM 6.4.1, 6.4.2; SC [6.3.1-6.3.4]; Sh [4.3.1-4.3.4], 4.65.2, 4.8.7; Ti 7.3.1, 7.3.2; TMFF 6.4.1, 6.4.2;</li> <li>■ Re. ASC Species-standards [Work Environment and Health and Safety] see Ab [7.4.1-7.4.3] Bi [7.4.1-7.4.3]; FF ; Tr [6.4.1-6.4.5]; Pa [7.4.1-7.4.4]; Sa [6.5.1-6.5.6]; SSM [6.5.1-6.5.6; 6.11.1]; SC [6.4.1-6.4.5]; Sh; Ti [7.4.1-7.4.3]; TMFF [6.5.1-6.5.6; 6.11.1];</li> <li>■ Re. ASC Species-standards [Contracts, incl. subcontractors] see FF 6.7.1, 6.7.2; Pa [7.10.1-7.10.3], 7.11.5; Sa 6.7.1, 6.7.2; SSM 6.7.1, 6.7.2; SC 6.3.1, 6.3.2; Sh 3.4.1, 3.4.2, 4.5.5, 4.9.1, 4.9.2, 4.9.4, 4.9.5; TMFF 6.7.1, 6.7.2</li> <li>■ Re. ASC Species-standards [Conflict resolution / Worker management / Human Resources systems] see FF 6.6.1, 6.6.2; Pa [7.11.1-7.11.4]; Sa 6.8.1, 6.8.2; SSM 6.8.1, 6.8.2; SC 6.10.1, 6.10.2; Sh [4.10.1-4.10.4]; Ti [7.8.1-7.8.3]; TMFF 6.8.1, 6.8.2</li> <li>■ Re. ASC Species-standards [Disciplinary practices] see Ab 7.7.1; Bi 7.7.1; FF 6.9.1, 6.9.2; Tr 6.7.1, 6.7.2; Pa 7.7.1; Sa 6.9.1, 6.9.2; SSM 6.9.1, 6.9.2; SC [6.7.1-6.7.3]; Sh [4.7.1-4.7.3]; Ti 7.7.1; TMFF 6.9.1, 6.9.2;</li> <li>■ Re. ASC Species-standards [Working hours and overtime] See... Ab 7.8.1; Bi 7.8.1; FF 6.10.1, 6.10.2; Tr 6.8.1; Pa 7.8.1, 7.8.3, 7.8.4, 7.12.1; Sa 6.10.1, 6.10.2; SSM 6.10.1, 6.10.2; SC 6.8.31, 6.8.2; Sh 4.8.1, [4.8.3-4.8.6]; Ti 7.5.2; TMFF 6.10.1, 6.10.2</li> <li>■ Re. ASC Species-standards ; See... FF 6.11.1, 6.11.2; Pa 7.4.1; SSM 6.11.1, 6.11.2; SC 6.11.1, 6.11.2; Sh [4.11.1, 4.11.2]; Ti 7.3.1; TMFF 6.11.1, 6.11.2, 4.11.1, 4.11.2</li> <li>■ Ditto re. ASC Feed Standard and forthcoming Farm Standard.</li> <li>■ Strong interlinkage between SDG 8.7 and 8.8; See the respective ASC substantiations.</li> </ul>	3	0.5	3.5
8.9	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
8.10	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
8.A	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
8.B	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
SDG 8	<b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	15 + 4.5 = 19.5 / 7 = SDG score of 2.8		



SDG 9	SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	ASC SDG 9 Overall Contribution score = 2.1		
9.1	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
9.2	<p>Whole ASC programme contributes directly and this is a core part of the ASC Mission ("to transform aquaculture towards environmental sustainability and social responsibility...") although ASC only contributes indirectly to the latter part of this SDG target (with no metric/leverages particularly enabling a 'rise in share of employment' etc.</p> <p>■ Re. 'Inclusive': Besides ASC' multistakeholder ethos, governance and processes embedded in the ASC standard-setting process and others, See also the Community Engagement requirements (in all standards) and e.g. P-SIA (Shrimp 3.1.1 and Pangasius 7.13.1/7.13.2); Etc.</p>	2	1	3
9.3	<p>Whole programme : ASC directly contributes here, notably through the Improver programme and ASC's Group Certification scheme; both of which are currently being scaled-up. (watch this space in future iteration)</p> <p>■ ASC's Improver programme [ASC IP] (<a href="https://www.asc-aqua.org/what-we-do/programme-improvements/improver-programme/">https://www.asc-aqua.org/what-we-do/programme-improvements/improver-programme/</a>) is designed to help small-scale farmers access the ASC Certification / 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 the sustainable/responsible seafood "value chains and markets". This can/could translate also into small-scale farmers not only benefitting from the ASC co-benefits ("Better farming practices can also drive efficiencies and lower costs") but also into receiving financial assistance in order to attain this. Innovations are key for ASC's Improver programme as they can bring down the cost of verification and access data. This is key because ASC doesn't want to drive further costs onto producers who are not even certified. ASC have piloted tech solutions with VerifiK8 in Vietnam (farm app, supported by ISEAL) and SeaWarden in Indonesia (satellite monitoring, also under ISEAL) to enhance data accessibility, support informed decision making around risk management, and help prep farmers for certification audits.</p> <p>■ ASC's Group Certification (<a href="https://www.asc-aqua.org/news/latest-news/new-group-certification-to-make-it-more-accessible-for-small-producers-to-apply-for-asc-certification/">https://www.asc-aqua.org/news/latest-news/new-group-certification-to-make-it-more-accessible-for-small-producers-to-apply-for-asc-certification/</a>) can also assist/help deliver this SDG indicator. It is aimed particularly at small-scale farmers; and the uptake of this Certification can possibly result into more small-scale industries in some regions.</p>	1	0	1
9.4	<p>All ASC standards have in-built "resource use efficiency" requirements at their core (Principle: "Use Resources in an Environmentally Efficient and Responsible Manner" - Salmon P4; Shrimp P7).</p> <p>■ Innovative solutions are also part of ASC standards revision considerations/process.</p> <p>■ ASC Mission is to 'transform' (i.e. "upgrade/retrofit") the industry in that regard. Specific (and metric-based) requirements include (but not limited to)</p> <p>■ e.g. monitoring/measurement: "Evidence of a documented strategy to reduce GHG per unit of production (measured in kilojoule/mt of change in fish biomass" (Flatfish, Seabass/Seabream, Tropical Marine Finfish 4.6.4) and "Documentation of GHG emissions of the feed used during the previous production cycle" (same Spp 4.6.3). + More in Feed Standard. NB: GHGe and Energy consumption are oft-linked.</p>	3	0	3
9.5	<p>ASC engages/collaborates (and at times 'requires' collaboration from certified farms) with scientists and the transparency re. farm data enables researchers to carry out studies. Several ASC standards (Salmon 3.1.2; Seriola and Cobia 5.1.2, Shrimp 2.11 and 3.1.1) include 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. " or re. (Tr. 8.3) "The farm shall conduct and make public, in collaboration with the local fishery trust(s), a scientific baseline study to determine the genetic composition of the contemporary wild and farmed fish / salmonid population(s) within the waterbody it operates in."</p> <p>■ See also Salmon 3.2.2: "If a non-native species is being produced, evidence of scientific research completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction and these results submitted to ASC for review"</p> <p>■ Consider higher performance rating in future iterations... (too conservative?)</p>	1	1	2
9.A	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
9.B	Linked to 9.5 ASC rationale and indirect contributions. See substantiations above (re. SDG 9.5)	1	0.5	1.5
9.C	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
SDG 9	Calculations (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	8 + 2.5 = 10.5 / 5 = SDG score of 2.1		



SDG 10	SDG 10: Reduce inequality within and among countries	ASC SDG 10 Overall Contribution score = 2.5		
10.1	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
10.2	ASC contributes directly and significantly here, particularly with reference to the non-discrimination requirements and respect for indigenous cultures. <ul style="list-style-type: none"> <li>■ See for instance Salmon 6.4 and Shrimp 4.3 - non-discrimination; Salmon 7.1 - community engagement; Salmon 7.2 - Respect for indigenous and aboriginal cultures and traditional territories. Non-discrimination criteria/indicators/requirements are embeded in all the ASC standards; with a zero tolerance towards discrimination and (e.g. Salmon) "Evidence of comprehensive and proactive anti-discrimination policies, procedures and practices"</li> </ul>	2	0.5	2.5
10.3	The ASC programme contributes to target SDG 10.3 directly and indirectly, and very strongly so. <ul style="list-style-type: none"> <li>■ All ASC standards have criteria/indicators / requirements re. the "Equality of pay, benefits and promotion opportunities for all workers" and re. "Evidence of comprehensive and proactive anti-discrimination policies, procedures and practices." and furthermore re. "Members of unions or worker organizations are not discriminated against by employers" (SC 6.3.1, Sh 4.6.2, TMFF 6.4.1).</li> <li>■ ALL the ASC standards equally require "Respect for indigenous and aboriginal cultures and traditional territories"</li> <li>■ All ASC standards have criteria/indicators / requirements re. non-discrimination; See also Abuse of working hours etc. (e.g. Salmon 6.10.1; 6.10.2) which is related: Zero tolerance re. "Number of incidences of discrimination" [must be nil]; Notably, the ASC also 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."</li> <li>■ Furthermore, such non-discrimination ethos also extends to workers of/subcontractors (e.g. forthcoming Feed Standard), producers of juvelines/smolts (Salmon); and "Evidence of a policy to ensure social compliance of its suppliers and contractors." is found in Flatfish, Salmon, Seabass and Seabream, Tropical Marine Finfish (6.7.2), Seriola and Cobia (6.9.2). This increase the Direct and indirect contributions of ASC re. SDG 10.3</li> <li>■ See also "Evidence of advertising positions within local communities before migrant workers are hired" requirements in Pa 7.15.1 and Sh 3.3.1</li> </ul>	3	1	4
10.4	ASC can and does contribute here (except re. Fiscal) through its Social (and related policies) requirements. All the non-discrimination requirements in all the ASC standards contribute to this SDG target too.	2	0	2
10.5	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
10.6	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
10.7	Whilst this SDG target is only partly within ASC's scope and ability to contribute -- and "sphere of influence " -- ASC's employment requirements mean that migrant workers have to be legal, which also contributes indirectly to this target. The scoring is thus deemed low, more because it is only partly within ASC's "sphere of influence " than due to other (ASC-aligned) social considerations.	1	0.5	1.5
10.A	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
10.B	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence " ; Although the ASC' Improver Program and other ASC initiative may position this SDG Target within ASC's "sphere of influence " in future iterations.			
10.C	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
SDG 10	Calculations (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	8 + 2 = 10 / 4 = SDG score of 2.5		

SDG 11	SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable	ASC SDG 11 Overall Contribution score = 2.67		
11.1	<p>The provision of accommodation for workers contributes here. Indirect impacts via 'fair wage' employment dimension and [beneficial] ripple effects in local communities</p> <ul style="list-style-type: none"> <li>■ See Spp standards FF, Sa, SC and TMFF 6.11.1; Pa 7.4.1, Sh 4.11.1, Ti 7.3.1</li> <li>■ See also Feed Standard 1.14.3 and Farm Standard (draft) 3.11.6 indicators</li> </ul>	2	0.5	2.5
11.2	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
11.3	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
11.4	<p>Whole programme contributes directly re. biodiversity conservation (incl. the Mangrove Project) and natural/cultural heritage. ASC has many criteria / indicators and requirements aimed at this within its "conserving natural habitats and local biodiversity and ecosystem function" Principle and in the "Be a good neighbour and conscientious citizen" Principle. These include (non-exhaustive list):</p> <ul style="list-style-type: none"> <li>■ "[No] Allowance for the farm to be sited in a protected area (PA) or High Conservation Value Areas (HCVAs)" such as World Heritage Sites. (all ASC standards, except Bivalves)</li> <li>■ "[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." (Abalone, Bivalve, Pangasius, Shrimp)</li> <li>■ All the ASC standards include community engagement, and demand respect of indigenous peoples' rights and protocol agreements; evidence of an effective policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations (Ab 6.1.3; Bi 6.1.10; FF, Sa, SSM, SC, TMFF 7.1.2; Pa 7.14.1/7.14.2; Sh 3.2.1; Ti 7.10.2)</li> <li>■ See also P-SIA and Community Engagement requirements (Pa 7.13.1/7.13.2; Sh 3.1.1). Etc.</li> </ul>	3	1	4
11.5	<p>ASC's work on conservation contributes directly and indirectly to this target. DRR (disaster risk reduction) with mangroves. Many climate-related/water-related tragedies/death tolls can be exacerbated by a degradation of natural habitats (e.g. mangroves) in coastal areas. ASC has various requirements aimed at protecting critical (incl. wetland) habitats, including 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 #ClimateChange). Mangrove protection, conservation and restoration are part of ASC's drive to protect biodiversity, 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.</p> <ul style="list-style-type: none"> <li>■ 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.</li> <li>■ The Shrimp standards indicator 2.4.1 ("Coastal barriers: Minimum permanent barrier (or natural) between farm and marine environments. Zone of natural vegetation must be 100 metres wide.")</li> </ul>	1	0.5	1.5
11.6	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
11.7	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
11.A	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
11.B	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
11.C	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
<b>SDG 11</b>	<b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	6 + 2 = 8 / 3 = SDG score of 2.67		

SDG 12	SDG 12: Ensure sustainable consumption and production patterns	ASC SDG 12 Overall Contribution score = 3.41		
12.1	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "; Although it can be argued that ASC contributes significantly to the realisation of this target as an enabler and provides substantiation/proxy/measure for the achievement of this target re. the topic of farmed seafood consumption.			
12.2	<p>Much of ASC's programme contributes directly, and very strongly so; as well as Indirectly via multiple 'ripple effects' in other economic sectors (e.g. Feed ingredients, but no only) and via increased awareness of 'sustainability' in wider community. This is a core part of the ASC's Mission and Vision, realised via ASC's Theory of Change. There are too many directly contribution to cite exhaustively, but all the criteria/indicators/requirements of the 11 Spp-standards under the "Use Resources in an Environmentally Efficient and Responsible Manner" Principle contribute, including Feed marine and terrestrial ingredients traceability, sourcing/manufacture, Efficient and Optimised diets, feed footprint (incl. GHGe/Energy) requirements; but also Waste disposal and recycling, water usage etc...</p> <ul style="list-style-type: none"> <li>■ "Evidence that all chemicals used on the farm that are discharged to effluent are recorded and quantified" Abalone 2.4.3, Flatfish 2.2.5, Tropical Marine Finfish 2.5.4 etc etc.)</li> <li>■ There us also an notable Interlinkage with SDG 14.1 (re. plastics etc. pollutions which can also be wasteful and constitute an unefficient use of other extractive commodities) and SDG 15.1. (see ASC substantiations for these...)</li> <li>■ Much of the Feed Standard and forthcoming Farm Standard Principle 2 criteria/indicators/requirements apply here too.</li> <li>■ The demonstration of the 'achieve' (wording of the SDG 12.2) is 3rd party independently audited by ASC programme and Chain of Custody assurance; further strengthened by ASC's suite of verification tools, etc.</li> <li>■ ASC is the only aquaculture certification programme that can verify your responsibly and sustainably farmed seafood is what it claims to be, where it came from, how it was raised and how it got to you (the audit report of the farms are also made public, ensuring the highest level of transparency, accountability and credibility). This is because ASC standards are the strictest and most responsible in the world. For example, some certifiers don't include farms in their chain of custody tracking or don't make unannounced inspections at farms. ASC does this and much more through independent, third-party auditors. See also <a href="https://us.asc-aqua.org/2021/11/30/verifying-seafood-origin-with-better-than-95-accuracy">https://us.asc-aqua.org/2021/11/30/verifying-seafood-origin-with-better-than-95-accuracy</a></li> <li>■ Etc.</li> </ul>	3	1.5	4.5
12.3	<p>Salmon P4 - Use Resources in an Environmentally Efficient and Responsible Manner; Shrimp P7 - Use Resources in an Environmentally Efficient and Responsible Manner; Salmon 3.4 - escapes;</p> <ul style="list-style-type: none"> <li>■ Many ASC standards (FF, SSM 3.3.4 and 3.3.5; Ab 3.1.1; FF, SSM, SC, TMFF 3.3.1, Tr 2.5.1, Sa 3.4.1, 3.4.4, Sh 6.1.2, Ti 4.1.1/4.2.1) require Transparency re. "Estimated unexplained loss and/or escapes of farmed fish is made publicly available" [Number Calculated at the end of the production cycle as: Unexplained loss = Stocking count – harvest count – mortalities – other known escapes] or set a maximum number of unexplained loss/loss/escapes. Such accountancy / transparency-prompted accountability also results in farmers taking greater care to avoid fish/future food losses and wastage.</li> <li>■ NB:ASC 'Outreach/education (so-to-speak) retailers and consumers to the merits and necessity of adopting a 'more responsible/sustainable' lifestyle will/does (increasingly) lead/contribute to this.</li> </ul>	2	0	2
12.4	<p>Much of ASC's programme contributes directly and very strongly so; This is also strongly interlinked to SDG 12.2 substantiation via ASC's 'protect and conserve' biodiversity requirements/initiatives.</p> <ul style="list-style-type: none"> <li>■ All ASC standards (except Abalone and Bivalves where this is N/A) 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 grams per ton of fish produced), the dates used, which group of fish were treated' etc. (or similar wording).</li> <li>■ Other examples of substantiation can be found in Salmon P4 - Use Resources in an Environmentally Efficient and Responsible Manner; Shrimp P7 - Use Resources in an Environmentally Efficient and Responsible Manner; Salmon 4.5, Shrimp 7.7 - hazardous waste.</li> <li>■ There are also (indirect) ripple effects only via education and awareness beyond the certified UoC, community engagement and awareness of how ASC mitigates various pollution.</li> </ul>	3	0.5	3.5

12.5	<p>Much of ASC's programme contributes directly and very strongly so; This is also interlinked to SDG 12.2, SDG 12.4 and SDG 14.1 (among others). Substantiation via ASC's 'protect and conserve' biodiversity requirements/initiatives and ASC's many requirements re. hazardous waste, effluents and anti-pollution.</p> <ul style="list-style-type: none"> <li>■ Furthermore, ASC is also reviewing the need for new criteria/indicators targeting specifically 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 ("Marine Litter and Aquaculture Gear" – published on November 28, 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 five R's: Reduce, Re-use, Recycle, Recover, Refuse.</li> <li>■ See "ASC's focus on Plastics, Marine Litter and Ghost Gear" information: <a href="https://www.asc-aqua.org/programme-improvements/marine-litter/">https://www.asc-aqua.org/programme-improvements/marine-litter/</a></li> <li>■ 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 e.g. 'proper/responsible disposal' and/or recycling). 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".</li> <li>■ E.g. Salmon P4 - Use Resources in an Environmentally Efficient and Responsible Manner; Shrimp P7 - Use Resources in an Environmentally Efficient and Responsible Manner. ETC...</li> </ul>	3	0.5	3.5
12.6	<p>Whole programme contributes to target 12.6 directly and very strongly so : Both in the way our Theory of Change (ToC) encourages large and transnational companies to adopt sustainable practices. This is compounded by the 'Transparency' dimension of ASC certification, which – by making all audits reports and other farm/company data publicly available (e.g. Salmon Standard Annex VI) – contributes significantly and makes companies use ASC performance indicator internally (and oft communicate on them; e.g. via Sustainability/CSR reports and other Sustainability info compedia (e.g. GSI yearly Sustainability Reports).</p> <ul style="list-style-type: none"> <li>■ASC certification is seen as a milestone by farms/companies and valued as such. If/When those companies publish Sustainability Reports (or CSR Report etc.), they quote their ASC achievement.</li> <li>■With the increasing growth of the ASC programme and industry/seafood supply chain awareness re. 'Responsible Aquaculture' and 'Sustainable Seafood, the number of companies publishing Sustainability Reports can and will increase (also prompted by ASC' many transparency requirements + 'ASC Dashboards' online). Furthermore the act of offering ASC certification gives companies incentives to adopt sustainable practices. ASC programme raises the bar for entire industry (as per its Mission to transform aquaculture and perhaps others who look to ASC via ISEAL and other international fora) and 'first in class' encourages others to emulate some of the commitments/achievements (whether or not participating in ASC programme ).</li> </ul>	3	1	4
12.7	<p>This SDG target/issue is deemed to be outside of ASC's "sphere of influence "; although ASC can contribute significantly to the realisation of this target as an enabler and provides substantiation/proxy/measure for the achievement of this target. ASC works towards advocating to market actors, including governments, that pledging/committing towards and engaging with ASC-certification for their seafood-related procurement policies would help address this SDG indicator.</p>			
12.8	<p>Whole programme contributes to target 12.8 directly and indirectly; and rather strongly so (e.g. Salmon 6.12 Corporate policies for social responsibilities). ASC's communicates (and increasingly so) to all stakeholders of the aquaculture/seafood chain re. "information and awareness for sustainable development and lifestyles in harmony with nature" relevant to responsible aquaculture products production and consumption and is embarking on B2C communication. ASC programme , ASC logo use; Work of ASC Outreach Team, All transparency-related indicators and ASC programme attributes, Theory of Change, Market Transformation ethos...</p> <ul style="list-style-type: none"> <li>■ See also the Retailers and Partners commitments to ASC and their associated communication re. responsible and sustainable seafood communications</li> <li>■ See also the ASC-MSC joint consumer campaigns in various of the countries where seafood consumption is important.</li> <li>■Note the interlinkage here also with the substantiation provided for SDG 12.6.</li> <li>■ See also re. disclosures 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 &gt; 1% [&gt;2% Sh] transgenic content"; embedded in most ASC standards</li> </ul>	2	1	3
12.A	<p>This SDG target/issue is deemed to be outside of ASC's "sphere of influence "; ASC can offer some means to some countries to realise this target via its programme 's activity. See notably our work in Vietnam, Ecuador (Mangrove project), via UN FAO contributions/work etc. This indicator could be eligible for consideration within ASC's "sphere of influence " in future iteration. ASC works towards convincing and working (incl. Scientifically) with all those involved in the global aquaculture industry, including governments and agencies, that adopting and engaging with ASC would help address this SDG indicator.</p>			
12.B	<p>This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";</p>			
12.C	<p>This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";</p>			
<b>SDG 12</b>	<p><b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)</p>	16 + 4.5 = 20.5 / 6 = SDG score of 3.41		

SDG 13	SDG 13: Take urgent action to combat climate change and its impacts	ASC SDG 13 Overall Contribution score = 2.33		
13.1	<p>ASC's work on conservation has an indirect impact on the resilience of communities to cope with climate change.</p> <ul style="list-style-type: none"> <li>See also / Interlikeage with SDG 11.5</li> <li>Examples of how ASC address this SDG are tackled (for instance) by the following standards/indicatorss: Shrimp 2.2 - Conservation of protected areas or critical habitats; Protecting mangroves and other natural habitats in coastal regions increases resiliency to extreme climatic events. + Work on mangroves reduces their exposure; Shrimp 3.1 - impacts on communities.</li> </ul> <p>NB: This is indeed in "all countries" and not just in "all maritime countries"; some of the natural disasters include floods etc... for which Freshwater Trout Criteria 2.2 'Riparian Buffer Zones" (for example) provides mitigating/contributing requirements. ASC has various requirements aimed at protecting critical (incl. wetland) habitats, including 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 #ClimateChange).</p> <ul style="list-style-type: none"> <li>Mangrove protection, conservation and restoration are part of ASC's drive to protect biodiversity, 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, Freshwater Trout2.1.2, Pangasius 2.2.1, Shrimp 2.2.2, Tilapia 2.6.1 and Tropical Marine Finfish 2.3.3]. See also SDG 1.5.</li> <li>The Mangrove project (via Socio Manglar, a conservation incentives programme implemented by Ecuador's government, which oversees the funds from the Coastal Habitat Stewardship Fund: a partnership between the ASC, Conservation International and the Ecuadorian government's Ministry of Environment) where local associations are given regular economic incentives as well as access to mangrove areas in return for voluntarily committing to Sustainable Use and Stewardship Agreements to protect and maintain mangrove areas.</li> </ul>	2	1	3
13.2	<p>The ASC understands that education and awareness is a key part in 'combatting' and adressing the climate change challenges. It thus requires from all certified farms that they take an 'monitor and measure' approach as a first step to provide data to build understanding re. their various impacts. This includes energy use and greenhouse gas (GHG) emissions. All ASC standards (excepted 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".</p> <ul style="list-style-type: none"> <li>See ASC 's beyond certification advocacy and work towards awareness of Climate Change mitigation via adoption by industry of GHG Calculator tool. (See <a href="https://www.asc-aqua.org/how-were-helping-aquaculture-lead-by-example-on-climate-change/">https://www.asc-aqua.org/how-were-helping-aquaculture-lead-by-example-on-climate-change/</a>)</li> <li>Also, and at a more national/international level, ASC actively participates at EU level in LCA/Product Environmental Footprint (PEF) - Marine Fish scientific/methodology debate and definitions - which include climate change measures.</li> <li>Almost all of ASC's species standards include requirements for farms to calculate and track their energy consumption. The bivalve standard goes a bit further and requires upkeep of equipment to manage energy efficiency. This collection of data and, in some cases, reporting of energy use data to ASC, is a valuable resource for better understanding the relative energy reliance of diverse aquaculture systems, and ASC is currently analyzing those data in order to better understand this aspect of sustainability, with plans to publish and help fill gaps in the literature for some species and production methods.</li> <li>See for instance (non exhaustive list) Shrimp 2.5.2 and Salmon, FF, SSBn TMF 4.6.3 etc.</li> </ul>	2	0.5	2.5
13.3	<p>The way in which ASC helps tackle SDG12, notably and combined with ASC Market Development efforts/programme growth help achieve this SDG.</p> <ul style="list-style-type: none"> <li>Ongoing 'Outreach'/education (so-to-speak) retailers and consumers to the merits and necessity of adopting a 'more responsible/sustainable' lifestyle will/does (increasingly) lead/contribute to this. As the growth of the ASC Certification (currently present in 38 countries, at farm level) and of the (farm-to-fork and market/industry) programme globally progresses, the level of communication – via the ASC programme , Labelling, Market Development, Marketing, Communication, Collaboration etc. – around the SDG 13.3 issues and climate-change impact preparedness, notably in marine/aquatic and coastal areas, will go-on increasing...</li> <li>Almost all of ASC's species standards include requirements for farms to calculate and track their energy consumption. The bivalve standard goes a bit further and requires upkeep of equipment to manage energy efficiency. This collection of data and, in some cases, reporting of energy use data to ASC, is a valuable resource for better understanding the relative energy reliance of diverse aquaculture systems, and ASC is currently analyzing those data in order to better understand this aspect of sustainability, with plans to publish and help fill gaps in the literature for some species and production methods. (see also above SDG 13.1 and SDg 13.2 substantiations). These ASC requirements also collectively contribute(directly and indirectly) to furthering the awareness for "climate change mitigation, adaptation, impact reduction".</li> </ul>	1	0.5	1.5
13.A	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence ";			
13.B	This SDG target/issue is deemed to be (significantly) outside of ASC's "sphere of influence "; NB: elements of the SDG Target are being addressed by the ASC's joint Mangrove Project. Consider inclusion within ASC sphere of influence in next iteration of ASC's SDG performance mapping.			
SDG 13	Calculations (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	5 + 2 = 7 / 3 = SDG score of 2.33		

SDG 14	SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development	ASC SDG 14 Overall Contribution score = 3.14		
14.1	<ul style="list-style-type: none"> <li>■ The whole of the ASC contributes to target 14.1 directly and indirectly, and rather strongly so. Many of the criteria/indicators/requirements embedded in various standards' Principles. Notably:</li> <li>■ See re. Effluents and "nutrient pollutions" the criteria/indicators and requirements re. "Water quality in and near the site / Waste and effluents" or "Effluent contamination load / Nutrient release from production" in all the ASC standards; and e.g. "For any farm that cleans nets at on-land sites, evidence that net-cleaning sites have effluent treatment" (Sa 4.7.2; FF, SSM, TMFF 4.5.5)</li> <li>■ Eg of Spp-standards criteria (each with several indicators/requirements) include: 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; Shrimp 7.5 - effluent contaminant load; "Definition of a site-specific Allowable Zone of Effect (AZE) based on a robust and credible modeling system" and (many) etc.</li> <li>■ "Marine Litter and Aquaculture Gear" dimension of ASC (new indicators on their way...; See White Paper and "ASC's focus on Plastics, Marine Litter and Ghost Gear" information: <a href="https://www.asc-aqua.org/programme-improvements/marine-litter/">https://www.asc-aqua.org/programme-improvements/marine-litter/</a>). The ASC is also reviewing the need for new criteria/indicators targeting specifically the issue of marine litter, plastics and ghost gear, for implementation in future revisions of its standards or guidance documents... The white paper from ASC ("Marine Litter and Aquaculture Gear" – published on November 28, 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 five R's: Reduce, Re-use, Recycle, Recover, Refuse. See: <a href="https://www.asc-aqua.org/what-we-do/programme-improvements/gear-management/">https://www.asc-aqua.org/what-we-do/programme-improvements/gear-management/</a></li> <li>■ ASC's approach to plastic waste aligns with the United Nation's Sustainable Development Goal 14 (SDG14), Life Under Water, which was established to address marine pollution, conserve coastal and marine areas, increase scientific knowledge, and transfer technology to improve ocean health.</li> <li>■ see also for instance: "[No] Allowance for floats made out of open-cell Styrofoam" [Bivalves 6.1.3] and "Documented cleanup of receiving shoreline in response to gear loss based on local conditions" [Bi 6.1.6]; "Substantial gear (e.g., floats, cages, bags, predator nets and racks) is identifiable to farm (if applicable to growing [Bi 6.1.7]; "Provision of equipment for gear recovery (e.g., scoop nets and grapple hooks)" [Bi 6.1.8];</li> <li>■ SDG Target 14.1 is also strongly interlinked to SDG 12.2, SDG 12.4 and SDG 12.5. See the respective ASC substantiations for those SDG targets too.</li> </ul>	2	1	3

14.2	<p>Much of the ASC programme contributes to target 14.2 directly and indirectly; and very strongly so. Many of the criteria/indicators/requirements embedded in various standards' Principles. (Too many ASC criteria / indicators / requirements to cite here (not mentioning those pending in the forthcoming ASC Farm Standard and the Feed Standard). Ecosystem-based (and 'People in Ecosystem'-based) approach is central to ASC and close to its 'heart'... Indirectly, many ripple effects, raising awareness and other non-Farm/UoC impacts (but one can always improve/do better). Notably indicated related to:</p> <ul style="list-style-type: none"> <li>■ Principle 2 - Conserve Natural Habitat, Local Biodiversity and Ecosystem Function; including several requirements focused on: Interaction with critical or sensitive habitats and species; Benthic biodiversity; Interaction with wildlife, including predators; Site Connectivity; Water quality in and near the site / Waste and effluents; Effluent contamination load / Nutrient release from production [and Nutrient utilisation efficiency];</li> <li>■ Principle 3 - Protect the Health and Genetic Integrity of Wild Populations; including several requirements focused on: Participation in an Area-Based Management (ABM) scheme for managing disease and resistance to treatments that includes coordination of stocking, fallowing, therapeutic treatments and information sharing (Sa 3.1.1; SC 5.1.1); A demonstrated commitment to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks (Sa 3.1.2, SC 5.1.2; Sh 2.1.1 and 3.1.1); Interaction with critical or sensitive habitats and species; Introduced or amplified parasites and pathogens; Non-allowance for Non-native / exotic (synonyms: indigenous / endemic) species culture and/or only under strict conditions; prohibition re. "Use/Culture of transgenic fish/seed by the farm" (in all standards); Limited tolerance (performance levels) for any escapes; Transparency re. Estimated unexplained loss and/or escapes of farmed fish which has to be made publicly available; Evidence of escape prevention planning and related employee training,</li> <li>■ Principle 4 - Use Resources in an Environmentally Efficient and Responsible Manner; including several requirements focused on: "Source of non-marine raw materials in feed"; "Biological waste from production"; "Non-biological waste from production"; "Non-therapeutic chemical inputs" and restrictions/requirements re. "Therapeutic treatments"; Integrated Pest Management (IPM); No allowance for prophylactic use of antimicrobial treatments; No allowance for the application of chemicals that persist as toxins in the marine environment or on the farm or farmed animals; Compliance with all withholding periods after treatments. etc.</li> <li>■ Principle 5 - Manage disease and parasites in an environmentally responsible manner; as well as many Criteria of the Feed Standard v1.0.</li> <li>■ When marine-based; the overwhelming majority (&gt;99.9%) of aquaculture operations are located in EEZs; and ASC's standards have also several criteria/indicators / requirements 'using' a ecosystem-based approach.</li> <li>■ See also "ASC's focus on Plastics, Marine Litter and Ghost Gear" information: <a href="https://www.asc-aqua.org/programme-improvements/marine-litter/">https://www.asc-aqua.org/programme-improvements/marine-litter/</a></li> <li>■ A White Paper from ASC ("Marine Litter and Aquaculture Gear" – published on November 28, 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 five R's: Reduce, Re-use, Recycle, Recover, Refuse.</li> </ul>	3	1	4
14.3	<p>Mangroves play a significant part in combatting ocean acidification (by storing CO2, and more so [x10 for same area] than terrestrial forest); and ASC works towards mangrove protection and restoration (See Mangrove Project) + this is compounded by ASC's efforts and requirements aimed at preventing deforestation in general.</p> <ul style="list-style-type: none"> <li>■ Conservation and requirements in the Shrimp Standard; and other GHGe / deforestation considerations in Feed requirements in the various standards; notably new Feed Standard v1.0), Ongoing Shrimp Revision includes 'Mangroves', ASC's Coastal Habitat Restoration Fund supports the expansion of Mangrove Sustainable Use and Custody Agreements.</li> <li>■ The ASC understands that education and awareness is a key part in combatting and addressing the climate change challenges. It thus requires from all certified farms that they take an 'monitor and measure' approach as a first step to provide data to build understanding re. their various impacts. This includes energy use and greenhouse gas (GHG) emissions. All ASC standards (excepted 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".</li> <li>■ Also, and at a more national/international level (re. "scientific cooperation"), ASC actively participates at EU level in LCA/Product Environmental Footprint (PEF) - Marine Fish scientific debate and definitions - which include climate change measures.</li> <li>■ The Mangrove project (via Socio Manglar, a conservation incentives programme implemented by Ecuador's government, which oversees the funds from the Coastal Habitat Stewardship Fund: a partnership between the ASC, Conservation International and the Ecuadorian government's Ministry of Environment) where local associations are given regular economic incentives as well as access to mangrove areas in return for voluntarily committing to Sustainable Use and Stewardship Agreements to protect and maintain mangrove areas.</li> </ul>	2	1	3



14.4	<p>The combat to "end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans" is made very concrete throughout the ASC standards requirements, and of course also the Feed Standard v1.0; notably regarding to the criteria/indicators and requirements of Principle 4 "Use Resources in an Environmentally Efficient and Responsible Manner" within the current ASC species-standards; and notably the requirements focusing on the fact that fishmeal and fish oil used in feed must come from fisheries certified under a scheme that is an ISEAL member (e.g. MSC) and has guidelines that specifically promote responsible environmental management of small pelagic fisheries. The MSC Fisheries Standard for instance directly and very concretely addresses SDG Target 14.4. Knowing that marine ingredients are a key part of the diet of farmed fish; the ASC addresses SDG 14.4 in a very direct way; as well as indirectly via its promotion of other ISEAL member fisheries standards.</p> <ul style="list-style-type: none"> <li>■ The Feed Standard v1.0' indicator 2.2.5 ("The UoC shall conduct the Due Diligence Assessment[63] (as defined in Annex 3) on its ingredient manufacturers (marine-based ingredients, plant-based ingredients and other feed stuffs) to determine if the manufacturer can be accepted to the UoC.") also requires Due Diligence (DD) which enables to address/ensure that IUU fish do not find their way in the supply/manufacture of ASC-certified feed marine ingredient. "2.2.6 - The UoC shall conduct the Due Diligence Assessment (as defined in Annex 3) on its marine and plant raw material for every unique country/fishery to determine if the ingredient can be accepted into the UoC."; 2.2.7 - The UoC has a system to ensure only ingredients (marine-based ingredients, plant-based ingredients and other feed stuffs) that have passed the due diligence (2.2.5 and 2.2.6) are received by the UoC.</li> <li>■ The Feed Standard's Annex 3 re. Due Diligence includes MSC-certified fisheries and Marin Trust fisheries in the Third-party schemes demonstrating low risk for marine-based primary raw material producers for the risk factors (incl. "Risk factors for Marine-based primary raw material producers") - See pp80-81.</li> <li>■ Furthermore; ASC requires transparency regarding the certified (Feedmill) operation's performance in that regard: "2.2.8 - The UoC shall make public a summary of the risk assessment outcome and any measures taken. This applies where low risk has been determined (i.e. due diligence has been passed)."</li> <li>■ See also "[No] Allowance for the use of explosives" (Bi 4.1.5)</li> <li>■ All ASC species standards have criteria ensuring (sometimes with various wordings) 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". And Salmon 4.3.4 specifically cites (bans from the marine ingredient supply chain) 'IUU fish'; and</li> <li>■ this is also a significant part of the ASC Feed Standard launched in 2022 (see above).</li> <li>■ See also reference in all (except Bi where Non-scope) species-standard the "FishSource score" requirements to be attached, for the fishery(ies) from which all marine raw material in feed is derived. (FF, Sa, SSM, SC, TMFF 4.3.2; Tr 5.2.2; Pa 5.1.7, Sh 7.2.1, Ti 5.1.4)</li> </ul>	3	1	4
14.5	<p>It is important to note that this SDG Target is only partly within the scope of ASC's "sphere of influence" and/but it was decided to keep it 'in scope' in the current mapping/assessment as it is aligned with ASC's ethos and Principle "Conserve Natural Habitat, Local Biodiversity and Ecosystem Function" and with many of its other requirements. ASC's link with this SDG 14.5/SDG 14.5.1 is 'indirect' but nonetheless substantial. This explains why the SDG performance scoring is here perhaps rather low... but due to lack of alignment with ASC ethos but rather due being mostly outside ASC's "sphere of influence"...</p> <ul style="list-style-type: none"> <li>■ ASC does ensure that no siting of aquaculture takes place in MPAs/PAs (with exceptions)... but that's different from creating/reaching 10% MPAs; which comes as the result of regulatory powers (outside of ASC's remit).</li> <li>■ ASC can nonetheless 'help' the achievement of this Marine Protected Areas (MPAs) goal as it raises the profile of Responsible Aquaculture and promotes awareness of environmental sustainability.</li> <li>■ Areas within all ASC standards of relevance to promoting SDG 14.5: Biodiversity (metric measurement / requirements, constraints / non-allowance): <ul style="list-style-type: none"> <li>• Predator control</li> <li>• Mortality of ICUN red-listed species</li> <li>• Measuring, monitoring, establishing baselines (database)</li> <li>• HCVAs – no establishment within (or under strict conditions)</li> <li>• Community Engagement / ability for stakeholders ability for stakeholders to engage, make complaints and even appeal certification). -&gt; incl. re. siting in areas deemed by local NGOs to be of sensitive nature etc... (e.g. HCVAs)</li> <li>• Feed... Traceability and Sustainable Sourcing re. Marine ingredients from sustainable fisheries [also re. Feed Standard].</li> </ul> </li> </ul>	1	1	2
14.6	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
14.7	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			

14.A	<p>This SDG target/issue is deemed to be currently outside of ASC's "sphere of influence " (ASC aligned here more via ethos than deeds). However it is worth noting that the ongoing ASC work highlighted below helps address SDG 14.a: The ASC is also reviewing the need for new criteria/indicators targeting specifically 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 ("Marine Litter and Aquaculture Gear" – published on November 28, 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 five R's: Reduce, Re-use, Recycle, Recover, Refuse. See <a href="https://www.asc-aqua.org/what-we-do/programme-improvements/gear-management/">https://www.asc-aqua.org/what-we-do/programme-improvements/gear-management/</a></p> <p>ASC's approach to plastic waste aligns with the United Nation's Sustainable Development Goal 14 (SDG14), Life Under Water, which was established to address marine pollution, conserve coastal and marine areas, increase scientific knowledge, and transfer technology to improve ocean health.</p>			
14.B	<p>Whole programme contributes directly. ASC's Improver programme , ASC Group Certification.. Entire ASC programme ...</p> <ul style="list-style-type: none"> <li>■ The ASC Improver programme r (ASC IP) - and the Group Certification scheme - aim among others to improve (responsible farming, thus incl. economic) conditions of small-holder aquaculture farmers. Several of the ASC's "social" criteria/indicators/requirements are aimed at ensuring that local communities benefit from farm's operations, retain access to resources.</li> <li>■ The ASC programme is also aimed at enabling small-scale seafood producers to access ASC Certification (via e.g. the Group Certification methodology launched in April 2019: <a href="https://www.asc-aqua.org/news/latest-news/new-group-certification-to-make-it-more-accessible-for-small-producers-to-apply-for-asc-certification/">https://www.asc-aqua.org/news/latest-news/new-group-certification-to-make-it-more-accessible-for-small-producers-to-apply-for-asc-certification/</a>) and/or via the ASC's Improver programme , a pre-competitive approach to improvement (<a href="https://www.asc-aqua.org/what-we-do/programme-improvements/improver-programme/">https://www.asc-aqua.org/what-we-do/programme-improvements/improver-programme/</a>)</li> <li>■ It can also be argued that for those small scale aquaculture producers who are ASC certified; market access (notably to dev. countries markets) is substantially facilitated).</li> <li>■ see also "[No]Changes undertaken restricting access to vital community resources without community approval.' Ab 6.1.1, Sa, SC 7.3.1, Ti 7.10.1 etc.</li> <li>■ See also "Farm does not impede navigation, aquatic animals or water movement" (Ab 6.1.2, Bi 6.1.5, Pa 2.3.1)</li> </ul>	2	0	2
14.C	<p>The ASC programme contributes to target 14.C directly and indirectly, and very strongly so. The ethos of "Enhance the conservation and sustainable use of oceans and their resources ..." is at the basis of/underpins ASC's Vision and Mission and assurance that all ASC certified ops -- when in the realms of Oceans -- also are legally compliant. Core! ASC is dedicated - by design - to SDG 14.c</p> <ul style="list-style-type: none"> <li>■ There is also a strong interlinkage between this SDG Target and other SDG 14/SDG 12 targets (just to name a few) against which ASC is very well aligned and 'performs' strongly.</li> </ul>	3	1	4
SDG 14	<p><b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)</p>	$16 + 6 = 22 / 7 = \text{SDG score of } 3.14$		

SDG 15	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	ASC SDG 15 Overall Contribution score = 3.5		
15.1	<p>Much of the ASC programme contributes to target 15.1 directly and indirectly; and very strongly so. Not least via the Feed Standard re. "Deforestation". Many of the criteria/indicators/requirements embedded in various standards' Principles;</p> <ul style="list-style-type: none"> <li>■ Many aquaculture operations are located near-shore; onshore or inland/on-land so SDG 15.1 is of great relevance to ASC. This is particularly (but not exclusively; since the terrestrial footprint exists also for all marine finfish species via the production of their feed's terrestrial raw ingredients) the case for some freshwater and brackish water species for which ASC has a species-specific standard (e.g. Freshwater trout, Pangasius, Shrimp, Tilapia). In all those cases, the ASC standards and certification ensures that "...the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services" is considered/required in various ways; with numerous relevant criteria/indicators/requirements. Some of those aquaculture operations are and can thus also be located near wetlands or in mountains; and/or ASC certification will ensure that they not be located in some particularly sensitive areas (PAs, wetlands, mangroves, etc.)</li> <li>■ In all its species-specific standards, ASC requires "Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems..." which oft includes terrestrial and inland freshwater ecosystem.</li> <li>■ Principle 2 ("Conserve Natural Habitat, Local Biodiversity and Ecosystem Function") and Shrimp P2 ("Site Farms in Environmentally Suitable Locations while Conserving Biodiversity and Important Natural Ecosystems") include criteria/indicators/requirements focusing on water quality; Conservation of protected areas or critical habitats; Consideration of habitats critical for endangered species; Prevention of salinization of freshwater and soil resources etc.</li> <li>■ Furthermore, an important proportion of aquaculture's footprints occur via aquafeed; and the ASC Feed Standard (as well as the current species-standards) make many requirements aimed at the sustainable sourcing of non-marine (i.e. terrestrial) raw materials.i.e. terrestrial raw materials.</li> <li>■ See "ASC's New Feed Standard Will Tackle One of Biggest Threats to Aquaculture's Reputation" <a href="https://www.asc-aqua.org/news/latest-news/ascs-new-feed-standard-will-tackle-one-of-biggest-threats-to-aquacultures-reputation/">https://www.asc-aqua.org/news/latest-news/ascs-new-feed-standard-will-tackle-one-of-biggest-threats-to-aquacultures-reputation/</a></li> <li>■ ASC requires 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 &gt; 1% transgenic content. This is of relevance due to consumer information, because of biodiversity concerns and precautionary principle.</li> <li>■ See e.g. "Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed and feed ingredients (incl. "that comply with recognised crop moratoriums and local laws")." Ab 5.1.1; Tr 5.4.1, Sa, SSM, SC, TMFF 4.4.1, Ti 5.2.1.</li> <li>■ See re. "(100% Percentage of soya or soya-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)" - Tr 5.4.2, Sa 4.4.2, FF, SSM, SC, TMFF 4.4.3, Sh 7.2.2.</li> <li>■ ASC also bans the siting of farms in a protected area (PA) or High Conservation Value Areas (HCVAs) FF 2.3.2, Tr, Pa 2.1.1, Sa 2.4.2, SSM, SC, TMFF 2.3.2, Ti 2.6.1, Sh 2.2.1</li> <li>■ There are also many other relevant requirements re. riparian buffer zones (Tr 2.2.1; Sh 2.4.2); Payment of a contribution, of XX \$ per tonne of fish produced, to an environmental and social restoration fund annually (Sh 2.2.2); Corridors: Minimum width of permanent native and natural vegetation through farms to provide human or native wildlife movement across agricultural landscapes (Sh 2.4.3);</li> <li>■ See also the indicators/requirements re. "[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."</li> <li>■ Chris Ninnes, ASC CEO said: "ASC has a long-standing commitment to the protection of mangrove forests through the stringent requirements in our Shrimp Standard which prohibits deforestation. "We are dedicated to ensuring that shrimp farming is done responsibly and in a manner that conserves blue carbon ecosystems and supports the communities' dependent on them. As the leading certification programme for environmentally and socially responsible farmed seafood, we think it is our responsibility to now extend our work to areas complimentary to farm certification and this is the first in a number of projects we will undertake to do so." (<a href="https://www.asc-aqua.org/news/latest-news/ecuador-mangrove-fund/">https://www.asc-aqua.org/news/latest-news/ecuador-mangrove-fund/</a>)■ Etc...</li> </ul>	3	1.5	4.5

15.2	<p>ASC encourages, promotes and ensures that terrestrial feed ingredients (NB: i.e. the majority... of intrant/inputted ingredients into farmed fish production) are required to be sourced from sustainable agriculture sources; and this notably with a specific focus against deforestation (e.g. Amazon forest, but not only). + Link also to Mangrove project (<a href="https://www.asc-aqua.org/news/latest-news/ecuador-mangrove-fund/">https://www.asc-aqua.org/news/latest-news/ecuador-mangrove-fund/</a>)</p> <ul style="list-style-type: none"> <li>■ There is a very strong contribution from ASC's Feed Standard here (which will soon be required for providing aquafeed to any ASC-certified farms) re. deforestation which leads to 'degraded land' and desertification: One of the impacts of unsustainable farming on land is the degradation of soil, as a result of deforestation or the conversion of natural land into farmland. The Feed Standard, which applies to all feed mills producing feed for ASC certified farms, requires feed mills to source their ingredients from farms with a low risk for illegal deforestation, and will address a number of issues: transparency on origin, continual improvements, and greenhouse gas emissions, to name a few. In addition, ASC feed manufacturers must also contribute to the global effort to reduce deforestation and land conversion by means of a public commitment, followed by a public action plan, to transition towards deforestation and conversion free supply chains. (<a href="https://www.asc-aqua.org/celebrating-world-soil-day/">https://www.asc-aqua.org/celebrating-world-soil-day/</a>)</li> <li>■ There is a strong focus in the current Species-specific standard on preventing against deforestation via the "(100%) Percentage of soya or soya-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)" - Tr 5.4.2, Sa 4.4.2, FF, SSM, SC, TMFF 4.4.3, Sh 7.2.2.</li> <li>■ ASC Feed Standard v1.0 on preventing deforestation; and providing Due Diligence to that effect. This is a core focus of the Feed Standard.</li> <li>■ ASC Feed Standard Criterion 5.1 focuses on "The UoC works towards a deforestation/conversion-free supply chain". 5.1 comprises of 8 indicators and many requirements including "5.1.5 - The UoC shall have a public commitment(75) to transition to deforestation and conversion free supply chains for the sourcing of all of its plant ingredients (categories 1-3). The public commitment shall include: a cut-off date(76) related to deforestation and conversion that is no later than the month of release of the ASC Feed Standard v1.0. The commitment applies to aquaculture feed produced by the UoC." ETC...</li> <li>■ The rationale of Criterion 5.1 explicitly states: "A key concern of agriculture is the expansion of farmland through means of deforestation167 of (tropical and temperate) forests and conversion168 of other natural ecosystems169 (e.g. savannahs and grasslands). Amongst others, the UN Sustainable Development Goals address this key concern explicitly through SDG 15 – "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation170 and halt biodiversity loss". The impacts of deforestation and land conversion are diverse. Forests and other natural ecosystems act as carbon sinks through absorbing and locking-in carbon dioxide. In addition, these ecosystems provide habitat for many species, thereby contributing to conserving biodiversity, contribute to regional climate control and provide humanity with an abundance of natural resources if managed well." [...] "ASC certified feed manufacturers contribute to the global effort to reduce deforestation and land conversion by means of a public commitment, followed by a public action plan, to transition towards deforestation and conversion free supply chains. The requirements formulated for this are aligned with the principles of the AFi. Certified feed manufacturers are encouraged to include, as an additional goal, to work together with the supplier to have the suppliers become deforestation and conversion-free."</li> <li>■ "The assurance procedure defined in [Feed Standard] Annex 6 seeks to ensure there is a low risk of soy and palm oil ingredients coming from areas with any land conversion and deforestation. The assurance procedure also gives incentive for producers to work with supply chains to ensure low risk of any land conversion and deforestation for the highest volume plant ingredients used in feed mills, as well as encourages producers to do the same for all other plant ingredients."</li> <li>■ Furthermore, the Feed Standard's Due Diligence and record-keeping requirements also focus on "Risk of legal deforestation/conversion for category 1) soy and oil palm-derived ingredients, as well as for category 2) highest-volume plant ingredients" (3.1.1)</li> <li>■ Much of the substantiation listed for SDG 15.1 is also applicable (interlinkage between SDG 15.1 and 15.2) - See above.</li> </ul>	3	1	4
15.3	<ul style="list-style-type: none"> <li>■ "Striv[ing] to achieve a land degradation-neutral world" is certainly integrally part of ASC's ethos (illustrated in 'Feed'-terrestrial components / forthcoming Feed Standard). The ASC programme contributes to target 15.3 directly, and rather strongly so; Not least via the Feed Standard re. "Deforestation".</li> <li>■ Some ASC standards (e.g. Shrimp) are heavily focused on the "Prevention of salinization of freshwater and soil resources", and these are also firmly embedded in the Farm Standard (draft) indicators [2.8.1-2.8.4] (Criterion 2.8: Salinisation)</li> <li>■ The Rationale of the Draft Farm Standard Criterion 2.8 provides the following rationale, linking the topic to desertification; and highlighting it as one of its causes: "Salinisation can affect agricultural land and this is expected to be exacerbated by climate change. Affected agricultural lands can have reduced crop yields, or crop growth may be inhibited altogether as the salt affects a plants' root system and its ability to uptake water. This can drive poverty rates as it directly impacts a farmer's income, and it can force communities to abandon the area in search of more arable land." [...] "This can lead to a reduction in biodiversity and ecosystem function. Therefore, salinisation is a topic of concern - especially in combination with increasing pressure on natural habitat due to rising demands from the growing world population." [...] "Under this Criterion, the UoC will implement best practices to minimise their contribution towards the global issue of secondary salinisation of soil and freshwater". The same intent is displayed (not worded identically) in a other ASC standards re. the need to address and combat salinisation in aquaculture.</li> <li>■ Criterion 5.1 ("The UoC works towards a deforestation/conversion-free supply chain") of the Feed Standard cites (p55) in its rationale SDG 15: "A key concern of agriculture is the expansion of farmland through means of deforestation of (tropical and temperate) forests and conversion of other natural ecosystems (e.g. savannahs and grasslands). Amongst others, the UN Sustainable Development Goals address this key concern explicitly through SDG 15".</li> <li>■ Strong contribution from ASC's Feed Standard here (which will soon be required for providing aquafeed to any ASC-certified farms) re. deforestation which leads to 'degraded land' and desertification: One of the impacts of unsustainable farming on land is the degradation of soil, as a result of deforestation or the conversion of natural land into farmland. The Feed Standard, which applies to all feed mills producing feed for ASC certified farms, requires feed mills to source their ingredients from farms with a low risk for illegal deforestation, and will address a number of issues: transparency on origin, continual improvements, and greenhouse gas emissions, to name a few. In addition, ASC feed manufacturers must also contribute to the global effort to reduce deforestation and land conversion by means of a public commitment, followed by a public action plan, to transition towards deforestation and conversion free supply chains. (<a href="https://www.asc-aqua.org/celebrating-world-soil-day/">https://www.asc-aqua.org/celebrating-world-soil-day/</a>)</li> </ul>	2	0.5	2.5
15.4	<p>This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence "; Although this assessment re. SDG 15.6 could evolve in future SDG mapping iterations as 'mountain' include freshwater and marine ecosystems too (e.g. trout streams in Europe, but also Tilapia, Panga etc... in Asia/Americas, Salmon in BC/Canada/Norway/Chile etc., in Highlands and/or fjords environment) and of those environments were to be considered via the 'mountains' lense.</p>			

15.5	<p>Much of the ASC contributes to target 15.1 directly and indirectly; and very strongly so. Many of the criteria/indicators/requirements embedded in various standards' Principles; notably via all the ASC standard criteria/indicators/requirements related to ASC's Principle "Conserve Natural Habitat, Local Biodiversity and Ecosystem Function".</p> <ul style="list-style-type: none"> <li>■ This target (15.5) is strongly interlinked with other SDG targets and ASC is strongly aligned with its fulfilment. See the ASC substantiations above for SDG 15.1, SDG 15.2 and SDG 15.3/15.4.</li> <li>■ To those substantiations one could add the "Consideration of habitats critical for endangered species", "[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" etc. to cite but a few...</li> <li>■ 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." ["Zero tolerance"]; "Non-native / exotic (synonyms: indigenous / endemic) species culture"</li> <li>■ Other relevant requirements made by the ASC species standards include "Only non-lethal management (e.g., exclusion, deterrents and removal) of IUCN critical species that are pests or predators. ["Zero tolerance"]" in virtually all standards; Ditto re. "Use/Culture of transgenic fish/seed by the farm prohibited."; "Evidence of escape prevention planning and related employee training, including: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management; record keeping and reporting of risk events" Etc. Strong interlinkage with SDG 15.8 here (re. preventing loss of biodiversity) too.</li> <li>■ Strong contribution from ASC's Feed Standard here (which will soon be required for providing aquafeed to any ASC-certified farms): One of the impacts of unsustainable farming on land is the degradation of soil, as a result of deforestation or the conversion of natural land into farmland. The Feed Standard, which applies to all feed mills producing feed for ASC certified farms, requires feed mills to source their ingredients from farms with a low risk for illegal deforestation, and will address a number of issues: transparency on origin, continual improvements, and greenhouse gas emissions, to name a few. In addition, ASC feed manufacturers must also contribute to the global effort to reduce deforestation and land conversion by means of a public commitment, followed by a public action plan, to transition towards deforestation and conversion free supply chains. (<a href="https://www.asc-aqua.org/celebrating-world-soil-day/">https://www.asc-aqua.org/celebrating-world-soil-day/</a>)</li> </ul>	3	1.5	4.5
15.6	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence "; but interlinked to Community engagement and Community's access to resources requirements embedded in all ASC standards.			
15.7	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
15.8	<p>Many of the criteria/indicators/requirements embedded in the Principle "Conserve Natural Habitat, Local Biodiversity and Ecosystem Function" directly - and strongly so - contribute to SDG 15.8.</p> <ul style="list-style-type: none"> <li>■ All ASC Spp-specific standards include requirements re. "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 "in a protected area (PA) or High Conservation Value Areas (HCVAs)" (Ab 2.2.4, FF, SSM, SC, TMFF 2.3.2; Tr 2.1.1, Sa 2.4.2, Sh 2.2.1, Ti 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." (Ab 2.2.4, Bi 2.1.5, 2.3.5; Pa 2.2.4, Ti 2.3.1) .</li> <li>■ All standards have requirements aimed at protecting the impacts of "Introduction of non-native species" and the ASC standards' ban on the farming of Transgenics/GMO species (in all ASC standards) is also an expression of the Precautionary Principle regarding biodiversity and genetic diversity in the event where such animals should escape from the production facilities.</li> <li>■ ASC standards (except Ab) all have Criteria/indicators and requirements re. farmed fish/shellfish 'Escapes'. Escapes may be the result of poor or compromised structural integrity of the culture system, human errors or unforeseen events. Escapes present not only economic loss to the producer, but also pose ecological, pathogenic and genetic risk to local wildlife populations and ecosystems and should, therefore, be minimised as much as possible. Some standards include maximums/metric performance level re. escape or unexplained losses (FF, SSM, SC, TMFF 3.3.3/3.3.4; Sa 3.4.2) and require transparency on escapes/unexplained losses.</li> <li>■ Most of the ASC Spp specific standards address Benthic biodiversity (Redox potential or sulphide levels in sediment outside of the Allowable Zone of Effect (AZE); Faunal index score indicating good to high ecological quality in sediment outside the AZE; Definition of a site-specific Allowable Zone of Effect (AZE) based on a robust and credible modeling system) and Water quality in and near the site / Waste and effluents.</li> <li>■ Strong interlinkage with SDG 15.6 here (re. preventing loss of biodiversity) too. See ASC's substantiations above.</li> </ul>	3	0.5	3.5
15.9	<p>The ASC programme, vision, thought leadership and advocacy contribute to the core values of SDG 15.9. Entire ASC programme is in alignment with Aichi Biodiversity Target 2 re. ecosystems and biodiversity intersecting/interacting with aquaculture supply chain (e.g. Feed ingredients) and operations. This SDG Target is aimed more at National/local regulatory and policy levels (thus only partly within ASC's "Sphere of influence", but ASC alignment can be found via Advocacy and targeted projects.</p> <ul style="list-style-type: none"> <li>■ Strong interlinkage with SDG1 targets re. poverty reduction. See ASC's substantiations there too.</li> </ul>	2	0	2
15.A	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
15.B	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
15.C	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
<b>SDG 15</b>	<b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	16 + 5 = 21/ 6 = SDG score of 3.5		

SDG 16	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	ASC SDG 16 Overall Contribution score = 3		
16.1	<p>ASC has a significant direct and less direct contribution here in the spirit of the SDG 16 wording ("Promote peaceful and inclusive societies ...") by embedding many contributing indicators and requirements in its standards; under the Principle "Develop and operate farms in a socially responsible manner"; notably via the following criteria: "[No] Forced, bonded or compulsory labor"; "[No] Discrimination";</p> <ul style="list-style-type: none"> <li>■ 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, as per ASC standards, "Equality of pay, benefits and promotion opportunities for all workers" etc. The 'No Discriminations' ASC ethos and requirements thus contribute to a workplace culture benefits of which one could expect could also extend somewhat to the household and local community) conducive to "reducing all forms of violence" within ASC's sphere of influence . Establishing a link to the "... related death rates everywhere" wording of the target is however more difficult, explaining why the scoring, direct and indirect as high as it could otherwise be.</li> <li>■ All standards require Evidence that all [= 100%] health- and safety-related accidents and violations are recorded and corrective actions are taken when necessary;</li> <li>■ There is also a ripple effect extending to its subcontractors: Many of its standards require "Evidence of a policy to ensure social compliance of its suppliers and contractors" (FF, Sa, SSM, TMFF 6.7.2; SC 6.9.2)</li> <li>■ Further to the requirements above, the ASC Farm Standard (draft)'s indicator 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." which also contributes to SDG 16.1</li> </ul>	2	0.5	2.5
16.2	<p>Within its significant Sphere of influence (Farm UoC, but also Subcontractors/Suppliers; Feedmills and their suppliers) the ASC programme contributes to SDG 16.2 directly and indirectly; and very strongly so. Many of the criteria/indicators/requirements embedded in various standards' Criteria under the "Develop and operate farms in a socially responsible manner". Notably:</p> <ul style="list-style-type: none"> <li>■ All standards address Child Labour/Child exploitation; also with explicit rationale that children's education must prevail and should not be impeded.</li> <li>■ Ditto re. Forced, bonded or compulsory labor; there must be "[No,0 / zero] incidents where workers are required to surrender original identity documents upon commencing employment (except as required for processing of legal documentation".</li> <li>■ Equally, workers must have "Freedom of movement: Workers have the right to leave the workplace premises after completing the standard workday and be free to terminate their employment provided that they give reasonable notice to their organisation".... And have the "Right to leave the farm after completion of daily work duties."</li> <li>■ There must be "(0 / zero) incidence where the employers or any entity supplying labour withholds any part of worker salary, property, or benefits upon termination of employment"</li> <li>■ Additionally, ASC contributes by raising wider awareness of those issues within local communities, corporation, authorities and the supply chain on a an international level.</li> <li>■The Feed Standard takes the ASC's approach to responsible aquaculture and extends it to the feed mills that manufacture aquafeed, as well as the suppliers of their ingredients. As well as environmental sustainability, mills must also ensure they and their suppliers are socially responsible. For instance, independent auditors must verify that mills are not using forced or child labour, pay and treat their staff fairly, and must not discriminate on any grounds. (<a href="https://www.asc-aqua.org/news/latest-news/ascs-new-feed-standard-will-tackle-one-of-biggest-threats-to-aquacultures-reputation/">https://www.asc-aqua.org/news/latest-news/ascs-new-feed-standard-will-tackle-one-of-biggest-threats-to-aquacultures-reputation/</a>)</li> <li>■See the new CAR's relevance: On 14th July 2022, ASC released revised Certification and Accreditation requirements (CAR) and Certification requirements for Unit of Certification (RUoC) for the ASC Farm standards , and new CAR and RUoC documents for the Feed Standard. These four documents are important in helping ASC to operationalise the standards and define the processes necessary to audit against them. The revised CAR reinforces to CABs that companies carrying out fraudulent activities confirmed by a statutory authority and those involved in child labour, slavery, human trafficking or forced labour are not eligible to hold ASC certification.</li> </ul>	3	0.5	3.5
16.3	<p>This is a core principle (Legal Compliance) / Principle 1 = " Legal Compliance - "Comply with all applicable national laws and local regulations"</p> <ul style="list-style-type: none"> <li>■ "Promot[ing] the rule of law at the national and international levels and ensure equal access to justice for all" is underpinned and embedded in all ASC standards (Principle 1). Furthermore, all ASC standards included indicators/requirements for complaint procedures/mechanisms; which include reporting violences and any discrimination.</li> <li>■ "Implementation of a verifiable conflict resolution policy for conflicts and complaints tracked transparently' – (Pangasius 7.11.4, Shrimp 4.10.3, Tilapia 7.8.3)</li> <li>■ "Evidence of workers access to effective, fair and confidential grievance procedures." (Flatfish, Salmon, Seabass and Seabream, Tropical Marine Finfish 6.8.1;Pangasius 7.11.1; Shrimp 4.10.1/3)</li> <li>■ "Presence and evidence of an effective policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations." – All standards, re. community stakeholders' complaints.</li> </ul>	2	0.5	2.5
16.4	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			



16.5	<ul style="list-style-type: none"> <li>■ The 3rd party certification body (CAB) chosen by farm independently from standard setter (Tripartite systems also reduces risks);</li> <li>■ All ASC species-specific standards include requirements re Worker contracts are fair and transparent;</li> <li>■ Re. Independence and impartiality: No monies from farm seeking certification received by certification programme for any aspect of pre-audit/audit process;</li> <li>■ There is "independence"(from standard setter) re. accreditation / qualification of CABs. Whilst the ASC programme is itself independent/transparent and open to scrutiny etc..The auditing of company procedures doesn't necessarily rule out corruption/bribery from corporate practices.</li> <li>■ Whilst the 'bribery/corruption' aspects is not explicitly spelled-out in the ASC species-specific standards, the (draft) ASC Farm Standard will address this specifically with its Business Ethics indicators: 1.3.1: "The UoC shall prevent acts of corruption, extortion, embezzlement or bribery" and 1.3.2 "The UoC shall ensure that records are not falsified and information is not misrepresented."</li> <li>■ Similar anti-corruption/bribery/embezzlements requirements are found in the Feed Standard v1.0 (1.2.2 and 1.2.3).</li> <li>■ Also see 'demonstrating compliance with Tax laws' (All species -- excepted Ab, Bi -- standards 1.1.2)</li> </ul>	2	0	2
16.6	<p>Within its sphere of influence (Farm UoC, but also Subcontractors/Suppliers; Feedmills and their suppliers) the ASC programme contributes to SDG 16.6 directly; and very strongly so.</p> <ul style="list-style-type: none"> <li>■ Note the strong interlinkage between SDG 16.6 and SDG 16.10 (and 16.7)</li> <li>■ Independence and impartiality: No monies from farm seeking certification received by certification programme for any aspect of pre-audit/audit process;</li> <li>■ Certification programme itself under 3rd party supervision and peer scrutiny; Independent (from standard-setter) accreditation / qualification of CABs; Rigorous monitoring and evaluation process (MandE) to assess programme 's impacts; and regular revision of standards via multi-stakeholder process; 3</li> <li>■ 3rd party certification body (CAB) chosen by farm independently from standard-setter; Unannounced audits by CAB (risk-based); ASC is not involved in any monetary transactions</li> <li>■ Many Transparency requirements unique to ASC in the realm of aquaculture certification schemes: Audit reports made publicly available; Transparency - Farm production data made public; Transparency – Producer has to tell buyer if feed contains GMO plant ingredients; Biodiversity assessment: External expert assessment compulsory and results made publicly available; Social Impact Assessment (P-SIA) for Pangasius and Shrimp farms;</li> <li>■ Supply Chain Assurance on Traceability: Chain of Custody (CoC) certification is mandatory;</li> <li>■ Impact measure: non-conformities in farm performance leading to certificate suspensions made public (e.g. website)(e.g. see Salmon Standard Annex 6)</li> <li>■ Traceability of raw materials in feed; Shrimp 4.9 Worker contracts are fair and transparent; Shrimp 4.10 Fair and transparent worker management systems; Shrimp 3.2 Complaints by affected stakeholders are being resolved; Shrimp 3.3 Transparency in providing employment opportunities within local communities; Shrimp 3.4 Contract farming arrangements (if practiced) are fair and transparent to the contract farmer, Etc...</li> <li>■ ASC's Feed standards embeds and enables 'transparency' for various dimension, aside the Social/Working conditions; Criterion 3.4 is titled "The UoC is transparent on products characteristics"; with indicators 3.4.1-3.4.4 re. N/P content of Feed (3.4.1), GMO ingredients disclosure (3.4.2); active compounds and inclusion levels of added antibiotics and other medicinal feed additives (3.4.3), and requires the UoC to "disclose relevant information regarding the inclusion level of whole-fish marine ingredients of each feed product159 to ASC certified farms and farm applicants for ASC certification." (3.4.4)</li> <li>■ Many other attributes of the ASC programme (beyond its standards) are also transparent and accountable (responses to feedback of public consultations etc.) ASC publishes annually our impacts reports based on measured, public available data</li> <li>■ ASC publishes annually its main financials: which money comes in from where and what it is spent for.</li> <li>■ ASC requires salmon farms to publish ongoingly any incidents around topics like sealice, escapes, marine mammals etc</li> <li>■ ASC publicly shares data and research to researchers to support science on industry progress towards responsible practices.</li> <li>■ Additionally, the (draft) Farm Standard has also several indicators (3.7.1-3.7.4) with explicit and more detailed requirements re. "Transparent contracts". Ditto for Feed (Criterion 1.9).</li> <li>■ Etc...</li> </ul>	3	0.5	3.5
16.7	<p>Within its sphere of influence (re. "Ensure responsive, inclusive, participatory and representative decision-making at all levels") the ASC programme contributes to SDG 16.6 directly; and very strongly so.</p> <ul style="list-style-type: none"> <li>■ See above as there is a strong interlinkage between SDG 16.6 and SDG 16.7;</li> <li>■ There is a strong Multi-stakeholder dimension to the working of the ASC programme ; including (but not limited) to public consultation on standard revisions and new standards, disclosure/publication of audit report before farms are awarded certification (by CABs, independent from ASC the standard-setter); Rigorous monitoring and evaluation process (MandE) to assess programme 's impacts; and regular revision of standards via multi-stakeholder process; Public/stakeholders can comment Audit Findings prior to final publication and/or file complaint to independent 3rd party re. CABs performance;</li> <li>■ Re. "inclusive and participatory" dimension explicitly, Community Engagement requirements are embedded in all ASC standards; incl. Complaints by affected stakeholders are being resolved"; "Evidence of regular and meaningful consultation and engagement with community representatives and organisations."</li> <li>■ ASC also applies these requirements specifically to indigenous groups/communities: Evidence that the farm has undertaken proactive consultation with indigenous communities; and 'evidence of acknowledgement of indigenous groups' rights";</li> <li>■ See also requirements for farm owners to undertake a participatory Social Impact Assessment (p-SIA) [Pangasius 7.13.1/7.13.2 and Shrimp 3.1.1]. Etc...</li> <li>■ Ditto on all the above re. Feed and forthcoming Farm standards.</li> <li>■ See also Conflict resolution and other Transparency requirements (e.g. substantiation for SDG 16.6)</li> </ul>	3	0	3
16.8	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			



16.9	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
16.10	<p>This SDG target is particularly well and strongly aligned with the ASC ethos. ASC requires a great level of transparency from the operations (farms/feedmills) seeking ASC certification; and all this information is to be made readily accessible to the public; often going much beyond regulatory/mandatory requirements.</p> <ul style="list-style-type: none"> <li>■ Note the strong interlinkage between 16.10 and SDG 16.6. See ASC's substantiation above re. Transparency (re. SDG 16.6).</li> <li>■ the ASC's Certification programme itself under 3rd party supervision and peer scrutiny; Transparency – Audit reports made publicly available?; Transparency - Farm production data made public; Transparency – Producer has to tell buyer if feed contains GMO plant ingredients; Biodiversity assessment: External expert assessment compulsory and results made publicly available; Impact measure: non-conformities in farm performance leading to certificate suspensions made public (e.g. website). Re. SDG 16.10 (but not re. indicator 16.10.1; except re. trade unionist [protection]) All ASC standards have social/labour/working condition criteria/indicators/requirements focusing on 'Freedom of association and collective bargaining' and requiring among others "Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference".</li> <li>■ ASC offers a broad set of innovative verification (track and trace) tools with volume reconciliation in place and piloting on physical testing (TEF) and digital tagging (KDE). This ensures that the labelled seafood being sold is coming from a certified farm</li> </ul> <p>The ASC, the Accreditation Body or the CAB can initiate an independent investigation if concerns arise. The CAB can suspend the certification if concerns are verified.</p> <ul style="list-style-type: none"> <li>■ See also the "Evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations" embedded in most standards</li> <li>■ 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 the 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. <p>For instance, whilst all the ASC standards ban the production of transgenic/GMO fish and shellfish; they for most also ensure transparency around any transgenic material/ingredients (&gt;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 disclosures (which are inputted 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 (Annex VI) of dozens of salmon farms performance data (re. water quality, wildlife interactions, escape and unexplained losses data, sea-lice and benthic parasiticide monitoring levels, antibiotic loads etc.).</p> <ul style="list-style-type: none"> <li>■ Transparency/'Public access to information' is thus deeply embedded in the ASC certification process and the standards themselves.</li> </ul> <p>Whole programme contributes to target 16.10: the 'Transparency' dimension of ASC certification, which – by making all audits reports and other farm/company data publicly available – contributes significantly and makes companies use ASC performance indicator internally (and oft communicate on them; e.g. via Sustainability/CSR reports and other Sustainability info compedia (e.g. GSI yearly Sustainability Reports).</p> <ul style="list-style-type: none"> <li>■ See also all the Freedom of Association and Collective Bargaining requirements in all the ASC standards (e.g. Salmon 6.1.1).</li> </ul> </li></ul>	3	0.5	3.5
16.A	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
16.B	<p>All ASC standards have a series of criteria/indicators/requirements specifically aimed at eliminating discrimination in aquaculture farms and oft-also in their supply chain (NB: Ditto re Feed Standard; requirements for providers of broodstock/fish juveniles) etc.</p> <ul style="list-style-type: none"> <li>■ These requirements extend to suppliers and subcontractors or in the case of salmon to juvenile producers. They are embedded in all ASC species-specific standards, Feed Standard and will also feature in the forthcoming Farm Standard (in draft stage currently).</li> <li>■ NB: The training and education (in some case) of the workforce re. non-discrimination can lead also to wider indirect ripple effects and lead to further community awareness and empowerment.</li> <li>■ See also the requirements embedded in all standards re. "Presence and evidence of an effective policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations. " which are complemented with strict compliance metric performance levels: "Areas of conflict or dispute are recorded and shared among farm, local government and surrounding community representatives. At least XX% of the conflicts shall be resolved [e.g. 50% in Shrimp 3.2.2] within one year from the date of being filed, and a total of YY% [e.g. 75% in Shrimp 3.2.2] in the period between two successive audits." (Pa 7.14.3; Sh 3.2.2; Ti 7.10.2)</li> </ul>	3	0.5	3.5
SDG 16	<b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	21+ 3 = 24/ 8 = SDG score of 3		

SDG 17	SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development	ASC SDG 17 Overall Contribution score = 3.33		
17.1	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.2	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.3	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.4	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.5	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.6	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.7	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.8	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.9	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.10	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.11	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence " ; although ASC may contribute directly/indirectly by providing access to some markets to some ASC-certified producers in developing countries.			
17.12	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.13	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.14	<p>Whole ASC programme contribution (but less Standard-requirements-based, by SDG Target definition-wording); both directly and via indirect ripple effects,</p> <ul style="list-style-type: none"> <li>■ ASC works hard (via its staff daily work in several teams MarComm, Market Dev, Outreach etc.) to bring 'responsible production' and 'Sustainability' in terms of ("sustainable development") Policy and Market considerations.</li> <li>■ ASC is actively engaged with various partners at NGO / industry / country (incl. governments) / international levels in helping them to frame 'coherent' and 'responsible' environmental and social policies applicable to their aquaculture industries/stakeholders. E.g. MoUs and initiatives (in Indonesia, Vietnam, China etc.) and discussions/participation in workshops with officials/regulators in national and international agencies/institutions (UN FAO, various Directorates within the EU's European Commission (EC), many gov'ts etc.)</li> </ul>	2	1	3
17.15	<p>Making 'Legal Compliance' a base/initial / foundational compliance criteria to all ASC standards requirements (Principle 1 criteria and requirements), ASC respects (diplomatically) national jurisdictions whilst offering a framework for 'going beyond'. This in turn makes ASC a respected stakeholder in the global/national landscape and provides legitimacy. As a voluntary certification scheme, ASC programme leaves 'the space' for fulfillment of 17.15 and 'beyond'... and makes a very strong contribution on a global scale to that Target via the growth of its programme .</p> <ul style="list-style-type: none"> <li>■ Strong interlinkage with several SDG1 / SDG2 and SDG 12 targets (re. poverty eradication and sustainable development) and other SDGs.</li> <li>■ See ASC substantiations for SDG targets 1.1, 1.2, 1.4, 1.5, 2.1, 2.4, 12.2, 12.6 etc.</li> <li>■ See also the requirements re. "[100%] Percentage of soya or soya-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)" in most ASC species-standards;</li> <li>■ Ditto re. "Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed and feed ingredients (incl. "that comply with recognised crop moratoriums and local laws")."</li> </ul>	3	0.5	3.5

17.16	<p>Much of the ASC programme contributes to target 17.6 directly, and very strongly so. Part of collaborations for sustainable development. Global partnership and multistakeholder engagement ethos, practices and processes are strongly embedded at all levels (incl. Governance) of the ASC programme. Furthermore, many requirements within its standards ensure that these endeavours operate throughout ASC's sphere of influence including the ASC certified operations. ASC makes a very strong contribution on a global scale to that Target via the growth of its programme (which amplifies the relevant specific-standard requirements embedded within and 3rd party audited).</p> <ul style="list-style-type: none"> <li>■ See "Evidence of regular and meaningful consultation and engagement with community representatives and organisations" requirements embedded in most ASC standards.</li> <li>■ See also "Evidence of acknowledgment of indigenous groups' rights (if applicable to growing area)" (Bi 6.1.12; Tr 6.9.1)</li> <li>■ See "Participation in an Area-Based Management (ABM) scheme for managing disease and resistance to treatments that includes coordination of stocking, fallowing, therapeutic treatments and information sharing." (Sa 3.1.1; SC 5.1.1)</li> <li>■ See "A demonstrated commitment to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks." Sa 3.1.2, SC 5.1.2, via B-EIA (Sh 2.1.1) and p-SIA (Sh 3.1.1)</li> </ul>	3	0.5	3.5
17.17	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence "; Although ASC's multi-stakeholder ethos and the several partnerships for/in which it is collaboratively involved (including 'pre-competitively') globally / in several countries may help address SDG 17.16 and SDG 17.17			
17.18	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
17.19	This SDG target/issue is deemed to be currently (significantly) outside of ASC's "sphere of influence ";			
<b>SDG 17</b>	<b>Calculations</b> (Sums of Direct and Indirect SDG Target scorings totals, divided by the number of targets in scope for that particular SDG = ASC's SDG XX Contribution score)	8+ 2 = 10/ 3 = SDG score of 3.33		

