



**Scottish
Aquaculture
Innovation
Centre**

Do you agree that Scottish aquaculture would benefit from a national Centre of Excellence ?	<ol style="list-style-type: none"> 1. Strongly agree 2. Agree 3. Unsure 4. Disagree 5. Strongly disagree 	
Who do you think should lead the proposed Centre of Excellence ? (if 'other' please explain).	<ol style="list-style-type: none"> 1. Industry members 2. Academia 3. Government body 4. Public – private sector partnership 5. Other 	
What would you expect a Centre of Excellence to look like / comprise ? (if 'other' please explain)	<ol style="list-style-type: none"> 1. Building at University or HEI 2. Government labs 3. Lab / aquaria 4. Field trial(s) facility 5. Combination of new and existing facilities 6. Virtual entity 7. Other 	
Which Centre of Excellence specialism would most help your company to grow ? (if 'other' please explain).	<ol style="list-style-type: none"> 1. Cages and aquatic testing (field trials) 2. Production capabilities (aquaria) 3. Dry lab and tech development 4. Vaccine and pharmaceutical testing 5. Other 	
What do you see as being the Centre of Excellence's top 3 priorities ? (if 'other' please explain).	<ol style="list-style-type: none"> 1. Sea lice and gill health 2. Cleaner fish production 3. Feed formulation 4. Vaccine and medicines 5. Production in more exposed locations 6. Environmental challenges 7. Training 8. Other 	
What do you consider to be the emerging trends in Scottish aquaculture that may eventually require attention from / be candidate projects for a proposed Scottish Aquaculture Centre of Excellence ?	<p>Sea lice and gill disease are the most pressing issues which threaten to knock the Scottish sector off course. Future reliance on medicines and other chemical therapeutants poses an increasing risk as resistance continues to develop, and a range of new <u>non-chemical</u> techniques and technologies are required to replace these.</p> <p>The Development of a more sustainable innovative husbandry model should therefore be the highest priority for a CoE, exploring practical and realistic solutions that can be readily adopted by Scottish operators, and, where hard-ware is required, can be <u>developed, patented and</u> manufactured in Scotland. <u>The considerable economic</u></p>	

		<p><u>benefits of the sector could be diversified beyond the production of fish into the development of new husbandry technologies, which could be exported to other producing nations rather than Scotland being dependant on technologies developed elsewhere. Success in this area would provide considerable economic multipliers.</u></p> <p>New technology and techniques for recovery and re-use of organic wastes is another area which may help minimise impacts and possibly generate renewable energy.</p> <p>With pressure on world resources of fish meal and oil increasing, achieving long-term sustainable dietary formulations will become a more pressing priority <u>Again, this should not focus on simply replacing marine ingredients with ingredients produced via terrestrial agriculture (which may be questionable in terms of sustainability) but ingredients produced from novel sources such as those viably used elsewhere – LAP and chicken feather meal are examples, but there will be as yet untapped sources. In such cases, the use of materials such as chicken feather meal which are currently regarded as low value, or waste would be the best and truly sustainable alternates.</u></p>
<p>How do you envisage your company or organisation interfacing / supporting a proposed Scottish Aquaculture Centre of Excellence ? (funding, provision of facilities etc).</p>		<p>We think the CoE should concentrate on aligning strategic priorities for the Scottish Sector, and focusing resources on short, medium and long-term initiatives which map out the Scottish Industry's aspirations to produce sustainable fish for both the domestic and export markets.</p> <p>This strategy should be outcome-based, and coordinate all partner organisations both private and public increasing the chances of achieving a sustainable model that enhances the premium for Scottish produce.</p> <p>SEPA would be there to help and advise on environmental capacity and the minimisation of impacts, and to encourage companies to go beyond compliance with regulatory imperatives and set their own challenging targets. <u>SEPA will favour a direction of travel and initiatives which provide actual benefits in terms of, for example reduced resource use, increased recycling and engaging directly in the concept of the circular economy</u></p>
<p>Are there any business development activities dependent on applied research that you would like to undertake in Scotland but currently cannot ?</p>		<p><u>Not directly.?</u></p>

<p>Do you have any further comments, suggestions or ideas regarding a proposed Scottish Aquaculture Centre of Excellence ?</p>	<p><u>The challenge for the SACE is to ensure that it provides something that is not already provided by SAIC or others involved in supporting the Aquaculture Sector in Scotland. There is a risk in funding additional bodies if that funding in a sense is diluted and could be more usefully utilised as a critical mass within a smaller number of agencies. The trick therefore would appear to be to make sure that the SACE provides something genuinely unique that is not currently provided by the SAIC, Academic Institutions or research bodies.</u></p>
<p>If you wish to discuss any aspect of the proposed Scottish Aquaculture Centre of Excellence in more detail please contact.</p>	<p>alan@agsutherland.co.uk</p>