

Appendix 5. Additional supporting data from interviews.

Theme	Relevant Interview Excerpts
ESMC Member / Expert Interviews (C= consortium member)	
Unknown demand for offsets	<p>“The most important piece is: What's the demand? We can set up protocols, we can find farmers, we can get pilots done, but who's going to ultimately buy from this market?” (C5)</p> <p>“I don't really know what the demand is out there or the appetite from other companies for buying these things ... I don't really know a lot about the status of that demand side.” (C3)</p>
Importance of measurements and monitoring	<p>“We've been trying to really hold the line on the outcomes piece ... We don't want regenerative ag just to become another sort of checklist type thing. We're really pushing, stressing that the need for measurement.” (C3)</p>
Benefits and challenges of the collaborative approach	<p>“The most important piece to us is the multi-stakeholder consortium aspect. That's the one thing that ESGC seems to be in the best position to do, which is to pull together a really broad group of companies, of other partners, of funding sources and to use those companies and other partners' relationships to actually have a pretty broad engagement of producers. So we're much more interested in trying to support and be part of a multi-party effort like this rather than a single company trying to develop and design a carbon payment system for its own producers and then sell them to others” (C13)</p> <p>“There's this weird tension ... Where [companies say] ‘We want to be collaborative. We want to be part of this important step for our farmers and our members.’ But at the same time... ‘We've got to stop people coming in trying to steal market share and promise things that they can't deliver on.’ [We are] going to be watching and making sure that the thing is actually feasible and at the same time, maybe like any company involved, looking at other opportunities.” (C10)</p>

<p>Insetting & Scope 3 emissions reductions</p>	<p>“Scope 3 is... where the action is for us because that's the supply chain more broadly as opposed to the facilities or the plants themselves...that's where we're really focusing our energy.” (C3)</p> <p>“Our hopes for the ecosystem services market is that carbon insetting can be more efficient, equally as credible, but doesn't have to have all of the assurances that a traded commodity has to have.” (C12)</p> <p>“Scope three requires the buyers of the credits to be engaged in the intervention. It is a company that is looking at their own supply chain, in this case, agriculture... Right now, Scope 3 is 85 to 90% of the demand. Whether that will change in the future I think remains to be seen.” (C16)</p> <p>“The Science Based Targets Scope 3 emissions reduction goal ... is a big motivator for them to try to reduce their greenhouse gas footprint ... all these companies, we have emissions reduction goals that we have to meet for our public commitments.” (C3)</p>
<p>Need for risk mitigation and financial incentives</p>	<p>“People in agriculture don't just make huge dramatic changes impulsively, and things change with time. There is a lot of money and stuff at stake out there for them. Every year. And they already have so many unknowns, the chief one being money. And if they had practices that have worked for them in the past, maybe given a livelihood, it's difficult for them to break away from what they're doing.” (C6)</p> <p>“This could be globally very powerful if we can monetize this because all of a sudden it takes the financial pressure off a farmer.” (C17)</p>
<p>Challenge of scaling the market</p>	<p>“[The greatest challenge is the] ability to measure [soil carbon] changes over huge swaths of land very cheaply.” (C3)</p> <p>“One of the biggest challenges is maintaining rigor while achieving scale and cost. We can very accurately measure everything that we are interested in. You can't do that at scale and cost effectively. Right now, [we]'re trying to figure out what is the best way to achieve scale, cost effectively while maintaining rigor. We have to do all of this in a transparent fashion and ensure that we're meeting all of the existing standards.” (C16)</p>

Rancher Interviews (R= participant rancher)	
Limitations of existing conservation PES programs	<p>“There's pros and cons to it as well. If we need to do it, we need to do it. But now you also have a partner in your business as well as far as if you want to make any big changes.” (R15)</p> <p>“The one drawback [of certifications] for me is I'm a small enough producer ... if I can't offer them a full truckload, either they're going to discount me the difference in trucking or they're just not even gonna look at my calves. And so around here, I don't think anybody would be looking for grassfed cattle to buy and turn out in the California summer. They'd have to go to another state that has summer grass. So the logistics of that with my size don't work ... I think that premiums just doesn't work for my herd size.” (R8)</p>
Ranchers would require rigorous science, high enough payment, and risk mitigation to participate in carbon markets	<p>“I didn't think the science was there yet.” (R1)</p> <p>“\$15-20 per metric ton of carbon is never going to be enough money ... if we really want to see some incentive programs for ranchers that get to the next step, it needs to be more like \$70, \$80 a metric ton.” (R15)</p>
Comfort sharing records to participate in ESMC	<p>“I'd certainly be comfortable sharing my stocking rates—I already share it with the Forest Service because our ranch is intermingled with National Forest... Historically I would have said no. But now with SGMA, we're all gonna have to share records.” (R3)</p>