Case Study Seafresh Carbon reductions at processing site





Objective and approach



- Reduce carbon footprint of the product (Vannamei shrimp) and Seafresh processing site (Thailand)
- **Reduce operational costs** at Seafresh processing site

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- Installation of solar panels at Seafresh site
- Replacing biomass/coal boiler with two more efficient fuel A boilers
- Status: Completed

Activities to reduce carbon footprint



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Greenhouse Gas Emissions

		Before intervention	After intervention	Emission reduction
	Total emissions at processing site	8,536,000 kg CO ₂ e	5,841,000 kg CO ₂ e	-31.6% kg CO ₂ e
	Emissions per kg product at retail	13.5 kg CO ₂ e / kg product	13.2 kg CO ₂ e / kg product	-2.2% kg CO ₂ e / kg product
Detailed e	mission data Activity	Energy Reductions	s (annual) GHG emission reductions (ar	nnual)

ed emission data	Activity	Energy Reductions (annual)	GHG emission reductions (annual)
	Solar panels	2,511,341 kWh	1,255,000 kg CO2e
	Boiler replacement*	960,172 kWh	1,440,000 kg CO2e

* Estimate derived from primary data as the boilers have not yet been in place for a full year.

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Costs and benefits for Seafresh



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Reflections on implementation



Company internal process

- What led to the commitment to reduce the processing site's footprint? E.g. was any Life-Cycle Assessment done, or were you looking for low-hanging carbon fruits within your own sphere of influence?
- Which Seafresh function identified this opportunity and established contacts with the third party energy company? E.g. a sustainability professional or operational manager
- The old biomass boiler presented challenges in biomass supply and an inability to run at a reduced capacity
- Internal buy-in and mobilization of Capex was based on demonstrating the dual benefits of carbon reductions and operational savings



Challenges along the way

Delays in receiving new boilers from manufactures.



Learnings & recommendations

- Reductions in emissions often coincide with reduced costs
- 3rd party solar array model was successful and Seafresh is now expanding. If capital expenditure is a challenge for companies, this model could work well
- Increased efficiency is key in emissions reductions boiler output can now be tailored to production needs

