

# SWIF

## Seaweed Investment Fund

**Investment Thesis:** Our proposal seeks to sustainably and profitably address the harmful buildup of sargassum seaweed in the Caribbean, where it negatively impacts wildlife and coastal ecosystems, costing state and local governments millions in tax dollars.

**SWIF's model empowers seaweed harvesters with the working capital and resources they need to collect, sell and profit from waste seaweed while providing stable returns to investors through financing harvester operations and guaranteeing contracts that connect harvesters with businesses in need of raw seaweed-based materials.**

### CHALLENGE & OPPORTUNITY

Deforestation and water pollution significantly increase nutrient runoff into our oceans. That, in combination with rising global temperatures and warming oceans combined to create perfect conditions for massive sargassum seaweed blooms over the past decade. The massive increase in sargassum blooms is an ecological and economic crisis, particularly in the Caribbean region, where the travel and tourism sector contributed over \$24bn to its gross domestic product (GDP) in 2020. The inundation of sargassum can smother coastal ecosystems and threatens people's livelihoods.

Currently, most municipalities tackle this problem by using bulldozers to load seaweed onto trucks and bury it in landfills, causing considerable beach erosion. In 2018, the estimated annual cost of such practices in the Caribbean was \$120 million. This estimate does not factor the economic impact of lost tourism bookings or the negative PR that occurs whenever tourists post pictures of sargassum covering beaches.

Many companies have found sustainable, commercial uses for sargassum, from alginates (a biomaterial extracted from brown seaweed, which is a common ingredient in food thickeners, wound care and waterproofing agents for its gel-like properties) to textiles, biofuels, biostimulants and fertilizers, pulp and paper. These products help reduce and offset emissions from fossil fuels and traditional plastics, while minimizing the harmful, wasteful practice of seaweed transportation and disposal.

SWIF presents an opportunity to **invest in the sustainable sargassum harvesting industry at low risk.**

### FINANCIAL INNOVATION:

SWIF is a boutique credit facility that offers loans designed to meet the unique needs of seaweed harvesters and end buyers in the relatively underdeveloped, fragmented sargassum seaweed market.

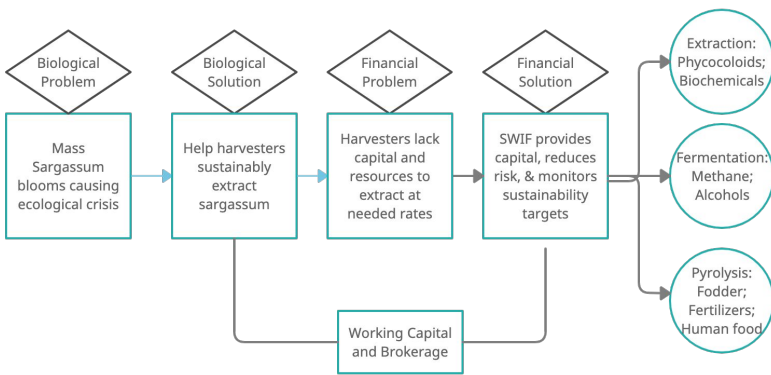
By combining small-business loans for harvesters with contracts guaranteeing raw seaweed availability, pricing and delivery to end buyers, SWIF provides:

1. Sargassum harvesters with start-up capital and sales contracts, enabling them to scale operations through additional human resources, research, and equipment, leading to healthier waters, cleaner beaches and local economic development
2. End buyers including textile, biofuel and fertilizer manufacturers with a guaranteed supply of raw seaweed in a significant but underserved and fragmented market
3. Investors with a fixed and steady rate of return tied directly to loan interest and seaweed sales contracts
4. A centralized contract brokering entity which does not currently exist in the Caribbean seaweed industry and would allow for standardized contracting and more equitable access to the market by new seaweed harvesters

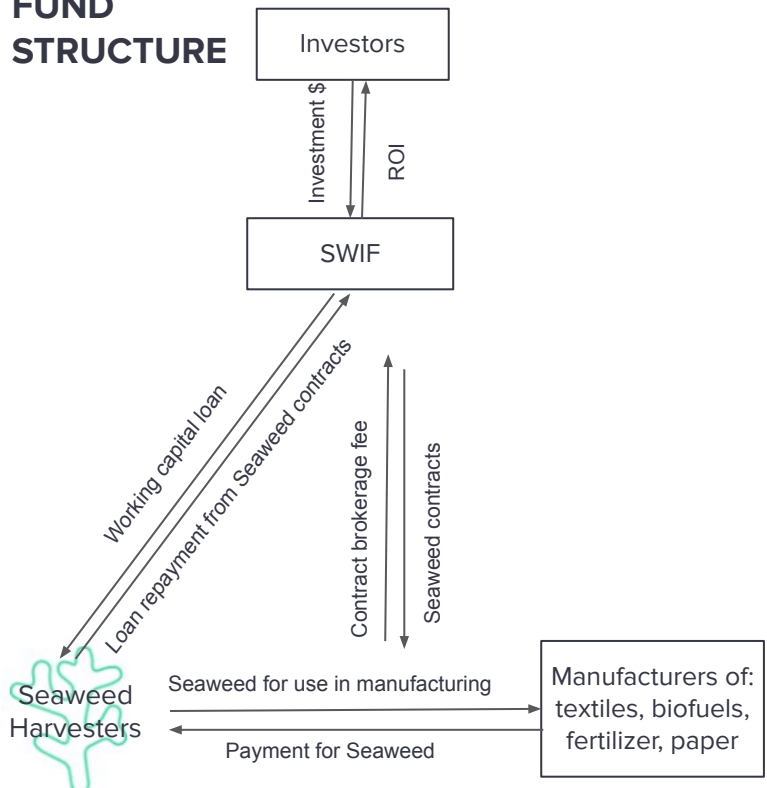
### SOLUTION OVERVIEW

Sustainable sargassum extraction can reduce ecological damage from blooms and problematic extraction practices, while also providing immense commercial opportunities

Sargassum Use Cases



### FUND STRUCTURE



## FUND PROFILE

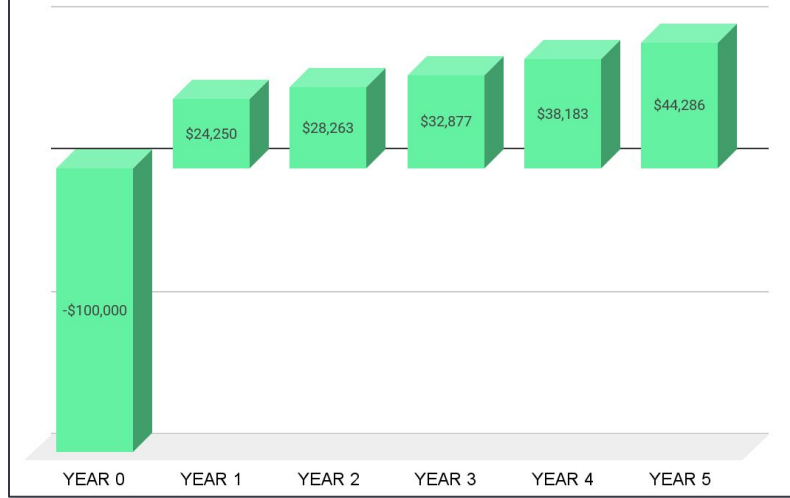
Fund Name	SWIF
Investment Managers	Benjamin, Grace, Nikhil, Sergio
Target Fund Size	\$10M
Minimum Investment	\$100k
Acreage	2,000 acre-foot
Initial Regional Focus	Caribbean beaches
Target Investor Pool	Impact investors, Foundations, Development Finance Institutions
Target IRR	20-22%
Fees and Incentives	2% origination fee
Tenor	5 year
Interest rate	LIBOR + 5% carried interest
Financial Covenants	Maintain min 5k working capital, use the cash flows to repay debt. No additional liens on original land.

## CASH FLOWS

(Amount in \$)	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Revenues (10% Growth)		25,000	28,750	33,063	38,022	43,725
Operating expenses		(10,000)	(11,500)	(13,225)	(15,209)	(17,490)
EBIT		15,000	17,250	19,838	22,813	26,235
Tax (25%)		(3,750)	(4,313)	(4,959)	(5,703)	(6,559)
Depreciation (2% of Revenues)		500	575	661	760	875
Capex	(100,000)	-	-	-	-	-
Changes in net working capital	-	(2,500)	(2,500)	(2,500)	(2,500)	(2,500)
Free cash flow	(100,000)	24,250	28,263	32,877	38,183	44,286
IRR	21.20%					
Loan repayment (50% of FCF)		\$12,125	\$14,131	\$16,438	\$19,092	\$22,143

## SOURCES AND USES OF FUNDS

Sources:	\$	%
SWIF Loan	\$100,000	100%
Uses:		
Origination Fee	\$2,500	2%
Working Capital	\$20,000	20%
20 acre-foot of water + water rights	\$30,000	30%
Pyrolysis system	\$25,000	25%
Technical Assistance	\$3,000	3%
Distribution Costs	\$10,000	10%
Legal/Regulatory	\$2,500	3%
Insurance	\$5,500	6%
Other costs	\$2,000	2%
<b>Total</b>	<b>\$100,000</b>	<b>100%</b>



## SCALABILITY AND IMPACT

The total economic value of the seaweed industry is \$16.7bn and is projected to reach \$30.2bn by 2025, recording a CAGR of 12.6% during the forecast period. After piloting in the Caribbean, SWIF can expand to other regions where sargassum seaweed is a problem (Miami, California and coastal Europe).

Later iterations of the fund can target other seaweed types and issues, such as invasive species like the eurasian milfoil contaminating lakes throughout the Northeastern United States. Finally, SWIF can scale to incorporate cultivated seaweed, a carbon negative industry that takes place in about 50 countries, including Indonesia and China, which together represent over an 84% share of the world's seaweed cultivation.

		RISK	MITIGATION
<b>1 NO POVERTY</b>	Seaweed harvesting can help uplift the socio-economic status of coastal communities.		
<b>5 GENDER EQUALITY</b>	Seaweed harvesting is attractive to coastal communities; women can safely access the seaweed allowing women, in particular, an important opportunity to earn income.	Harmful Cultivation & Harvesting Processes	SWIF's reporting requirements ensure operational best practices for integrated coastal management policies and sustainable seaweed harvesting, including the protection of coral reefs, coastal ecosystems, and worker safety.
<b>13 CLIMATE ACTION</b>	Promote production of only existing, nature-based solution for removing CO2 loads from the ocean.	Contracting Risks	SWIF ensures seaweed harvesters which meet lending requirements are able to secure contracts.
<b>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</b>	Sustainable source of materials. Seaweed based products help reduce and offset emissions and pollution from fossil fuels and traditional plastics.	Variable Supply	A contingency is in place to hedge against supply shortages and reduce credit risk.
<b>14 LIFE BELOW WATER</b>	Incentivizes coastal management policy. Reverse dead zones by removing excess nitrogen and phosphorus runoff from terrestrial agriculture and re-oxygenating water.		