

# Blue Economy Update



**NOO  
RAAJJE**



**18 November 2021**

(Updated 6 Jan 2022)

- **High Level Strategy Update**
- Potential Financing Options
- Suggested Next Steps

# The One Thing

Many project ideas identified during the scoping phase



# The One Thing

Essential to focus on those that fit a compelling narrative where the Maldives has a global competitive advantage



THE ONE BIG NARRATIVE

# Building a Solid Foundation for Smart Sustainability - Level 1

This “one thing” narrative is a Solid Foundation for Smart Sustainability

level 1

THE ONE BIG NARRATIVE

# The Maldives is the World's First Smart Ocean State



# The Maldives is the World's First Smart Ocean State



The idea of the World's First Smart Ocean State is a blended narrative bringing together 4 key tracks identified by the Maldivian government as being critical:

The Natural Capital Track  
(harnesses the massive EEZ of the Maldives)

The Island Food Track  
(which includes fisheries)

The Clean Energy Track  
(identified by the World Bank as a key risk for the Maldives)

The Integrated Tourism Track  
(the backbone of the economy)

# Building a Solid Foundation for Smart Sustainability - Level 2

Finance is also a key layer in the foundation of a smart and sustainable ocean state.

level 2

FINANCE MECHANISM

level 1

THE ONE BIG NARRATIVE



# Building a Solid Foundation for Smart Sustainability - Level 2

Environmental



Social



Economic

Over \$1 Billion USD could be generated for Environmental, Economic, and Social developments for a resilient and sustainable Maldivian nation, the World's First Smart Ocean State. The availability of finance could promote confidence in the overall program.

*Financing is covered in the next section of this presentation*

# Building a Solid Foundation for Smart Sustainability - Level 3

Human capacity is also a key foundational layer.

level 3

HUMAN CAPACITY

level 2

FINANCE MECHANISM

level 1

THE ONE BIG NARRATIVE

# Building a Solid Foundation for Smart Sustainability - Level 3



## ***Blue University Program***

An accredited program of short courses could markedly improve human capacity for hundreds and thousands of Maldivians in areas related to the Blue Economy, including tourism and fisheries. This could be achieved in cooperation with the Maldives University and international universities

# Building a Solid Foundation for Smart Sustainability - Level 4

Ensuring teamwork using the existing human capacity is also critical.

This could be informal cross institutional teamwork and collaboration or more formal institution to institution collaboration

level 4

TEAMWORK

level 3

HUMAN CAPACITY

level 2

FINANCE MECHANISM

level 1

THE ONE BIG NARRATIVE

Foundations

# Building a Solid Foundation for Smart Sustainability - Level 3



## ***Blue Data Hub***

Teamwork could begin with knowledge sharing.

Currently, there are many repositories of ocean related data and ocean-related knowledge, including privately held information on island resorts.

It is vital to bring this knowledge together through a blue data hub and knowledge sharing network.

# Building a Solid Foundation for Smart Sustainability - Level 3

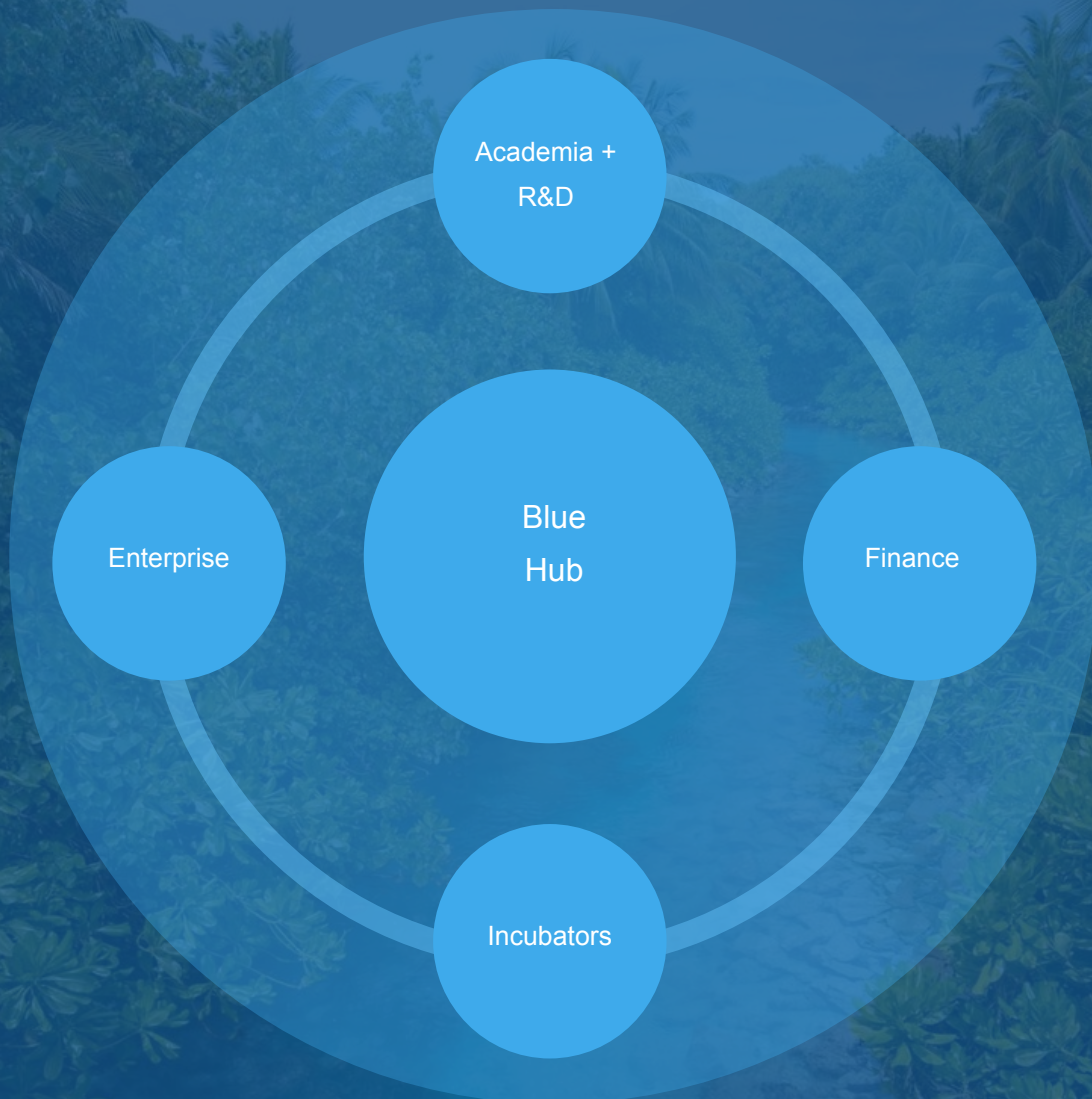


## *Blue Data Hub*

Currently, there are many repositories of ocean related data and ocean-related knowledge, including privately held information on island resorts.

The Noo Raajje program could become a forum for the sharing of knowledge and eventually, for sharing of data. This could be aided by an off-the-shelf data, knowledge and teamworking platform, accessible online.

# Building a Solid Foundation for Smart Sustainability - Level 3



## ***Blue Innovation Hub***

As exemplified by Silicon Valley, the clustering of innovators into close proximity has a multiplier effect that spurs innovation, business creation, jobs and economic growth.

This is especially marked when academic institutions, finance and an ecosystem of government R&D and commercial corporations are also nearby.

# Examples of Clusters & Innovation Hubs



San Francisco - "Silicon Valley"

(-)

Cambridge

(-)

Tel Aviv

(-)

Bangalore

(-)

Singapore

(-)



# Building a Solid Foundation for Smart Sustainability - Level 3



## ***Blue Innovation Hub***

Hulhumale could be an excellent location for the development of the Blue Innovation Hub given that real estate has already been planned to be used for a knowledge center.

Key steps could include:

- (a) firming up plans for the hospitality training centre in Hulhumale
- (b) considering the benefits of co-locating MMRI and the Coral Institute in close proximity on Hulhumale; where each Institution would retain its own space, identity and institutional arrangements.

## Building a Solid Foundation for Smart Sustainability - Level 3



### *Blue Innovation Hub*

Hulhumale could be an excellent location for this development.

This physical Blue Hub would be aided by the electronic blue hub and could be the progenitor for a number of blue related projects as part of the Maldives diversification strategy.

# Building a Solid Foundation for Smart Sustainability - Level 3



## ***Blue Innovation Hub***

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# Building a Solid Foundation for Smart Pillars of Sustainability

ENVIRONMENTAL

ECONOMIC

SOCIAL

level 4

TEAMWORK

level 3

HUMAN CAPACITY

level 2

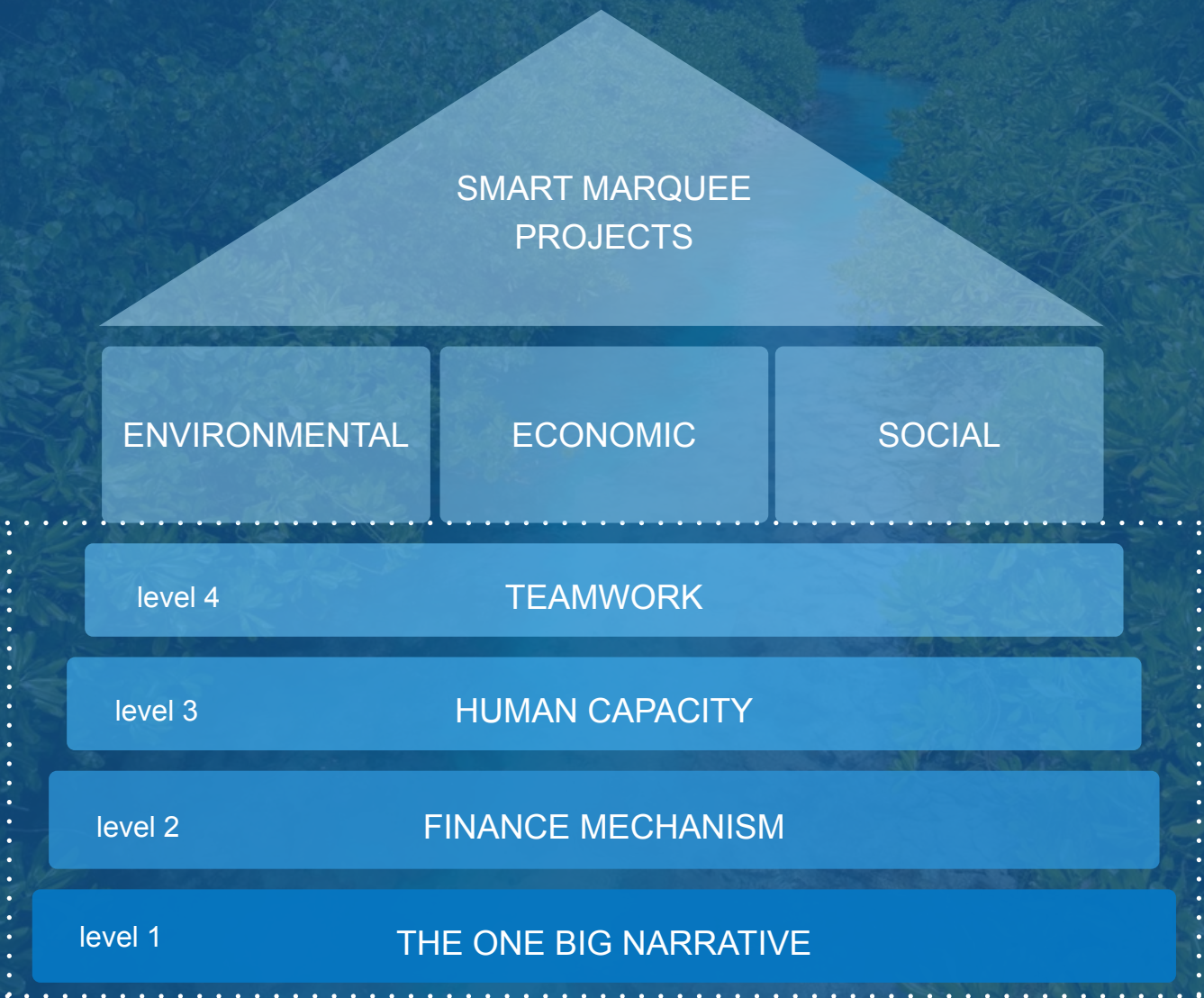
FINANCE MECHANISM

level 1

THE ONE BIG NARRATIVE

Foundations

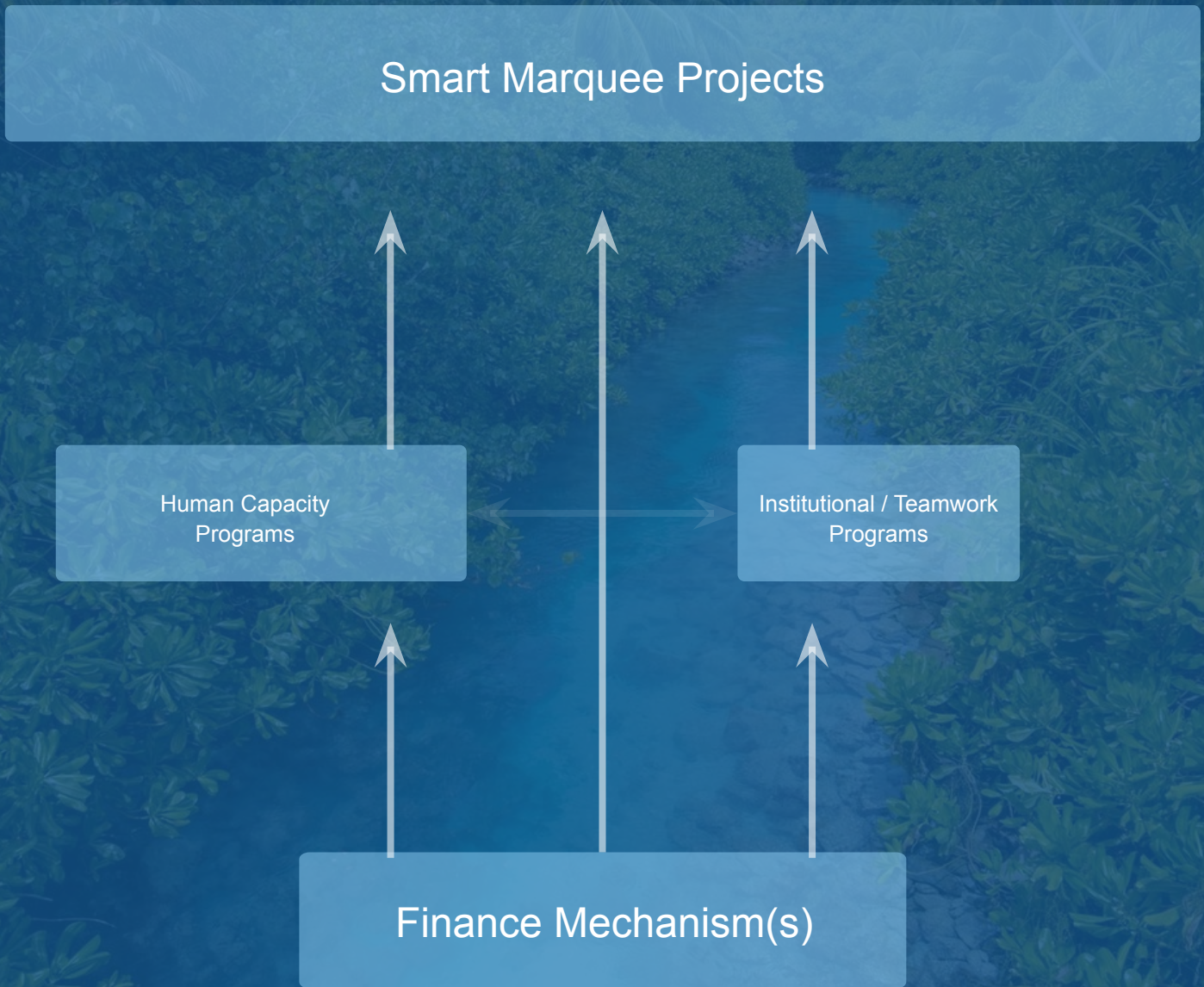
# Build a Solid Foundation & Strong Pillars for Smart Sustainable Marquee Projects



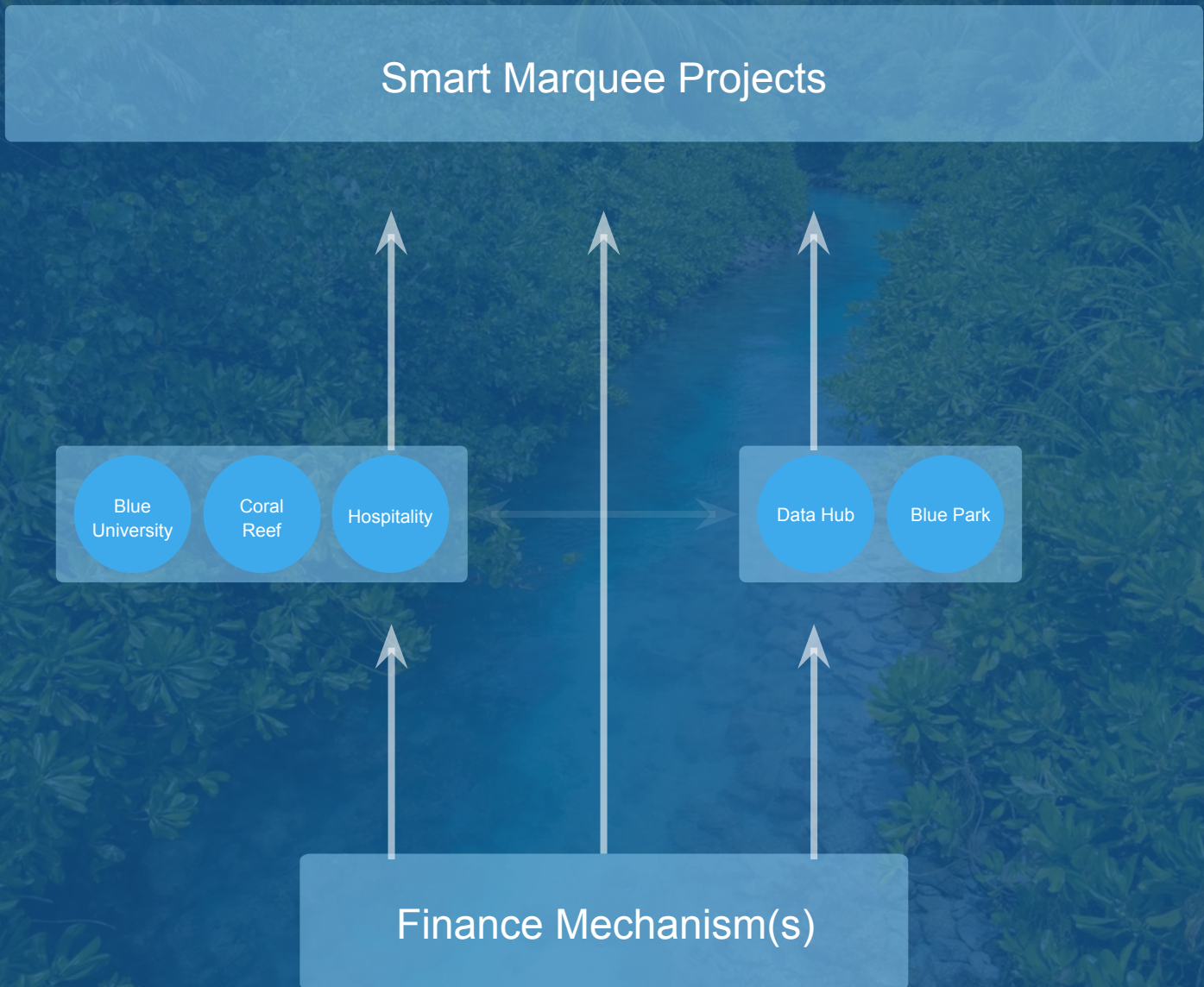
# Program Framework

Program Framework	Environment	Economic	Social
Marquee Projects	Electric Bikes and Buses (Energy Track)		
	Digital Connectivity Program (New Capacity Track)		
	MPA (Nature / Biosphere Track)		
	Utility Scale Floating Solar PV (Energy Track)		
	Branded Fisheries Program (Food Track)		
	Mariculture Program (Food Track)		
	Vertical Farming Program (Food Track)		
	Tourism: Conscious, Integrated, Digital, Wellness (Tourism Track)		
			Social Housing Program
Teamwork & Institutional Capacity	Blue Data hub (New Capacity Track)		
	Blue Innovation Hub (New Capacity Track)		
Human Capacity	Blue University Training Program (New Capacity Track)		
	International Reef / Marine Biology Program & Coral Gene Bank (Nature / Biosphere Track)		
		Hospitality Academy (New Capacity Track)	
Finance Mechanism	CO2 Quota Trading (New Finance Track)		
	Sovereign Resilience Fund (New Finance Track)		

# Simplified Framework

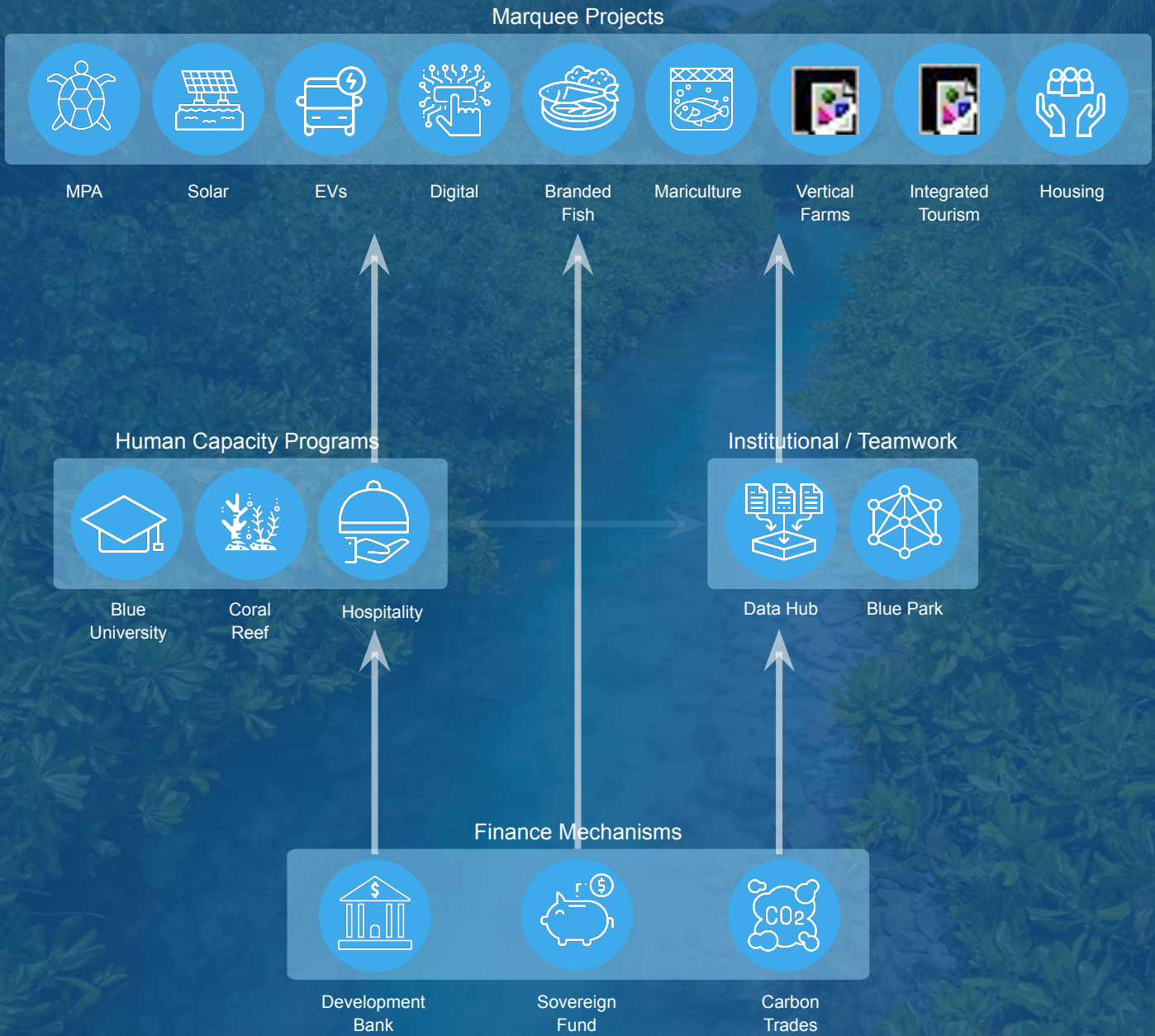


# Simplified Framework





# Simplified Framework



# Sixth Headline



## *Smart Marquee Projects*

Key projects to help drive diversification could include some or all of the projects shown here, as well as others.

## Seventh Headline



### ***Hulhumale: Blue Ignition Hub***

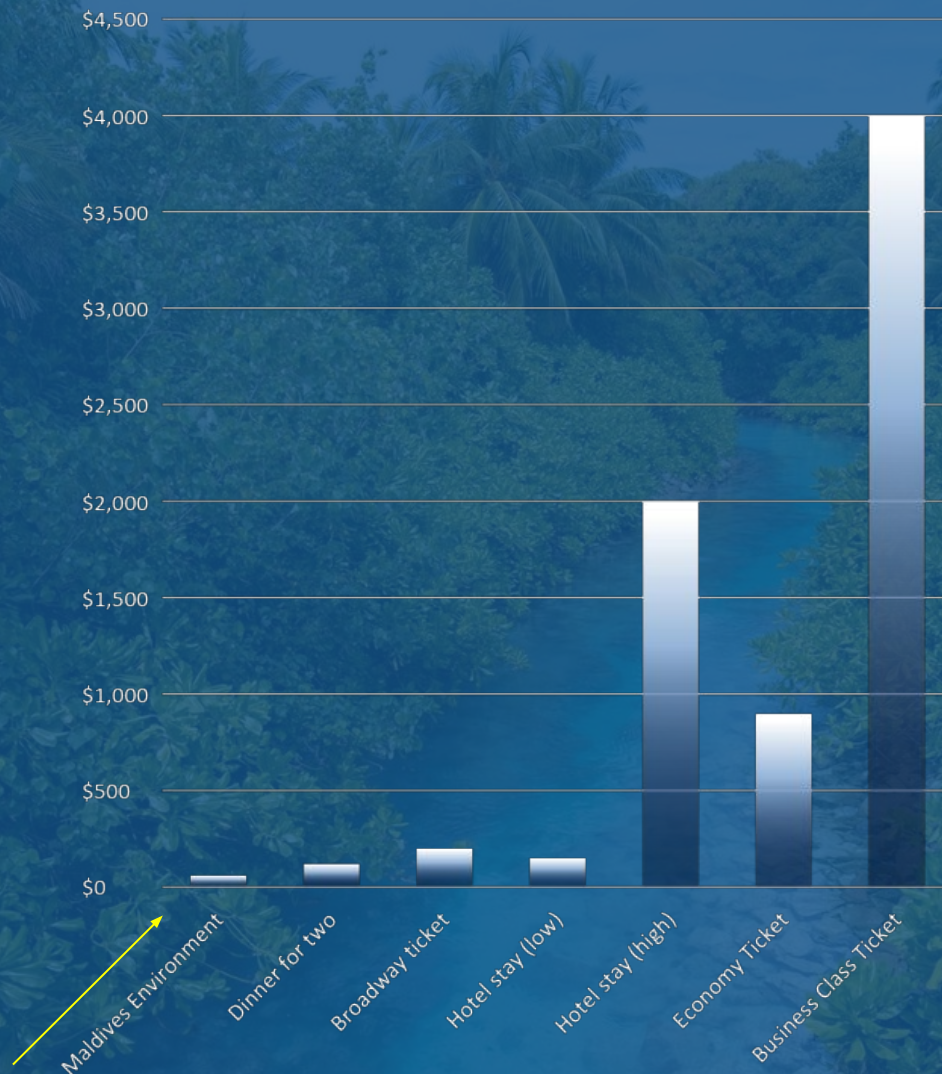
Hulhumale could become the “ignition hub” for the development of a multi-billion dollar blue economy and diversification strategy in the Maldives.

The Blue Hub could act as a center for inspiration, training, finance, and acceleration for Male, Hulhumale, and the outer regions and atolls to diversify and decentralize the Maldivian economy.

- High Level Strategy Update
- **Potential Financing Options**
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# Pricing the Unique Maldivian Environment

## Price Comparisons



There is a view that the unique environment of the Maldives is not being properly priced.

For example, \$60 USD to dive with Manta Rays is a low price leading to an oversubscription of users wishing to dive with Manta Rays and Whale Sharks. This could be detrimental to the environment.

Compare this with (a) average ticket prices to get to the Maldives, (b) per night cost at a hotel, (c) price of good meal for two at a luxury restaurant, or (d) compare it with the price of a Broadway ticket in New York.

These comparisons help make a strong argument that the Maldives environment is underpriced.

It is worth noting that

- There is an existing green tax which only charges tourists \$3-6 USD/day (depending on accommodation)
- And there is a \$30 fee collected on airline economy tickets (more for higher tier tickets) towards the international airport

# Possible Revenue Generation

	2021 numbers				2019 numbers
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Tourism Numbers</b>	<b>900,000</b>	1,080,000	1,296,000	1,555,200	1,866,240
<b>\$20 Fee</b>	<b>\$ 18,000,000</b>	\$ 21,600,000	\$ 25,920,000	\$ 31,104,000	\$ 37,324,800
<b>\$50 Fee</b>	\$ 45,000,000	\$ 54,000,000	\$ 64,800,000	\$ 77,760,000	\$ 93,312,000
<b>\$100 Fee</b>	\$ 90,000,000	\$ 108,000,000	\$ 129,600,000	\$ 155,520,000	\$ 186,624,000

	Year 6	Year 7	Year 8	Year 9	Year 10
<b>Tourism Numbers</b>	1,959,552	2,057,530	2,160,406	2,268,426	2,381,848
<b>\$20 Fee</b>	\$ 39,191,040	\$ 41,150,592	\$ 43,208,122	\$ 45,368,528	\$ 47,636,954
<b>\$50 Fee</b>	\$ 97,977,600	\$ 102,876,480	\$ 108,020,304	\$ 113,421,319	\$ 119,092,385
<b>\$100 Fee</b>	\$ 195,955,200	\$ 205,752,960	\$ 216,040,608	\$ 226,842,638	<b>\$ 238,184,770</b>

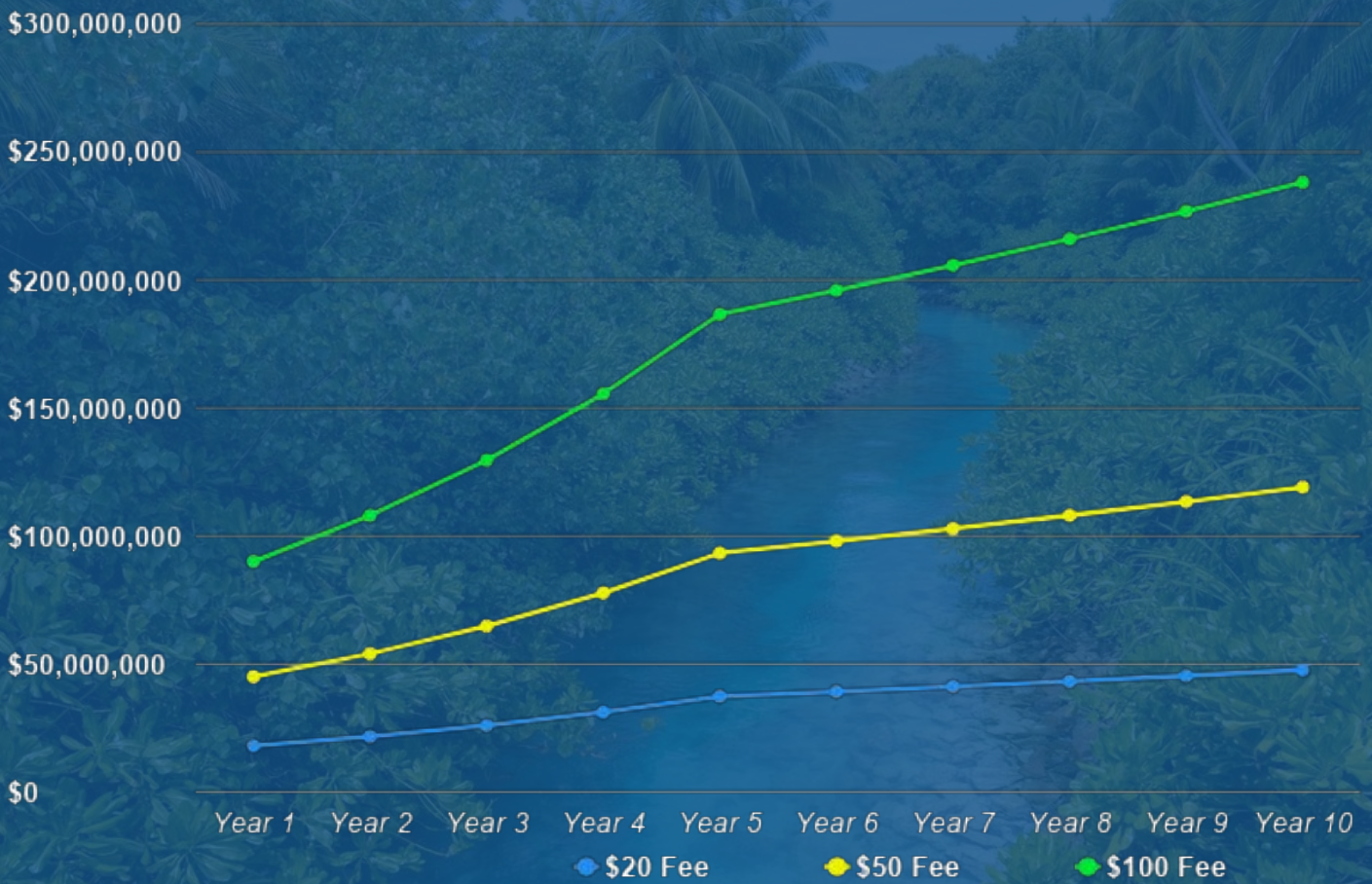
A fee collected on airline tickets could help the Maldives to invest in the economic, environmental and social dimensions of its blue economy. Revenues that could be generated on \$20, \$50 and \$100 USD are shown here.

Based on recent arrivals of around 900,000, this could yield \$18 million USD per year. Alternatively, a fee of \$100 could yield around \$170 million USD, based on 2019 arrivals.

The table above takes a conservative estimate regarding the Maldives' return to the 2019 arrivals volume over 5-year period and projects further growth thereafter. This shows that by year ten, between \$47 million and \$238 million could be generated annually.

# Possible Revenue Generation

## Potential Annual Income from Tourism Fees



## Securitizing revenues to get cash up front; in 2022 or in 2023.

Fee	Discount Rate	Net Present Value
\$ 20	7.5%	\$226,791,084
\$ 50	7.5%	\$566,977,710
\$ 100	7.5%	\$1,133,955,420

Instead of receiving monies annually, one option is to securitize the income stream in the form of a blue bond or a resilience bond.

These potential income streams could have a net present value of between \$200 million and \$1 billion dollars, based on a ten-year bond structure with a coupon of 7.5%. If the coupon (or the discount rate) is lower, then the NPV will be higher.



# Leveraging up to billions of dollars

	NP Values @ 5.0%	Leverage x 2	Leverage x 5
\$20	\$ <b>487,000,000</b>	\$ 974,000,000	\$ 2,435,000,000
\$50	\$ 1,217,000,000	\$ 2,434,000,000	\$ 6,085,000,000
\$100	\$ 2,435,000,000	\$ 4,870,000,000	\$ <b>12,175,000,000</b>

For example, a lower discount rate of **5%**, could yield between \$400 million and \$2 billion dollars.

Moreover, these monies could be further **leveraged** by a factor of 2 to yield almost \$1 billion (assuming a fee of \$20), or by a factor of 5 factor to yeild \$12 billion (assuming a \$100 fee). There are many permutations in between.

Note, that not all investments would attract co-financing, so \$12B is a hypothetical extreme. However, note also, that some projects could be leveraged even higher than 5, to attract co-financing at a ratio of 19.

## Acceptability of Fees

Contextual information will be needed to improve the acceptability of such fees

Key Arguments could include:

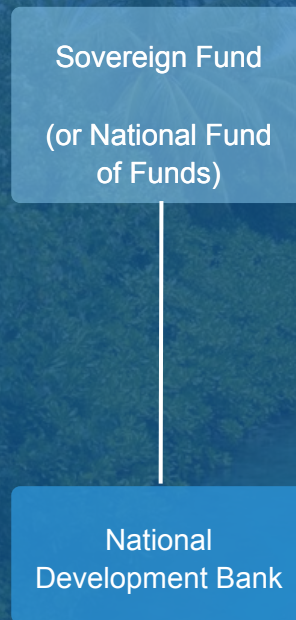
- 1) Maldives is highly vulnerable to Climate Change, access to climate funds has been difficult and COP-26 gave no new assurances that the Maldives could access climate funds more easily. Fees will be used as a catalyst to attract available finance for increasing resilience and decarbonizing the Maldivian economy.
- 2) The Maldives must diversify its economy. This takes investment which is not readily available from traditional sources
- 3) The Maldives must protect its environment. Tourism is the backbone of the economy, and with this fee structure, tourism becomes the solution for diversifying the economy and protecting the environment.
- 4) Funds from these fees will not go into the consolidated account, but will be managed through a transparent sovereign financing mechanism that will be used to attract co-financing, thereby leveraging up the value of the fund and its impact in the Maldives.

# Structure

## Options for structuring a sovereign financing mechanism

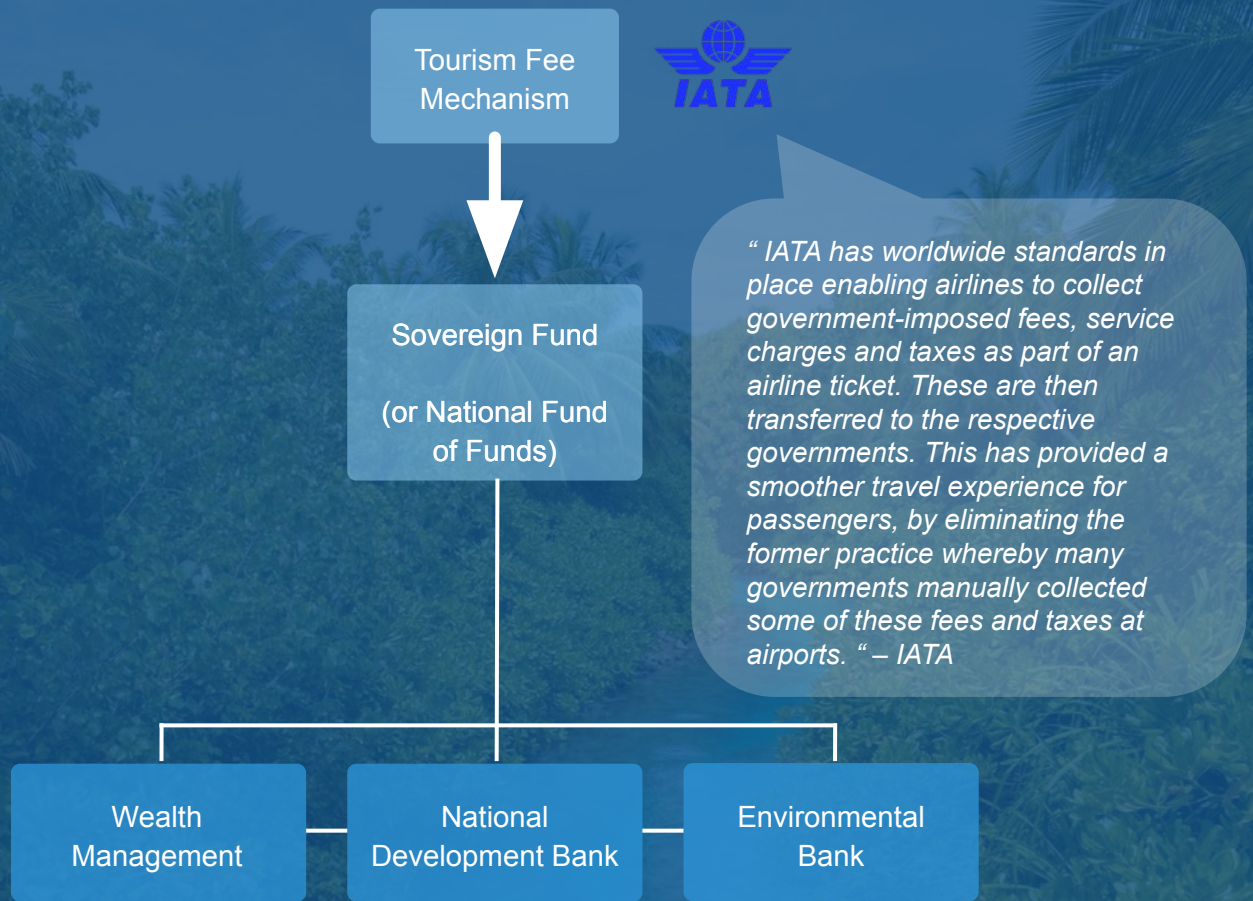
The following slides show how the mechanism could be structured so as to:

- 1) Support overall economic and social development
- 2) Safeguard environmental investments and benefits
- 3) Maximize leveraging opportunities
- 4) Improve SME Financing
- 5) Ensure coordination between SME financing and related project development financing
- 6) Ensure ongoing societal / social needs are met such as housing and training
- 7) Invest for a “rainy day”
- 8) Ensure independence, while working cooperatively with the President’s Office, the Ministry of Finance, the Ministry of Economic Development and the Ministry of Environment



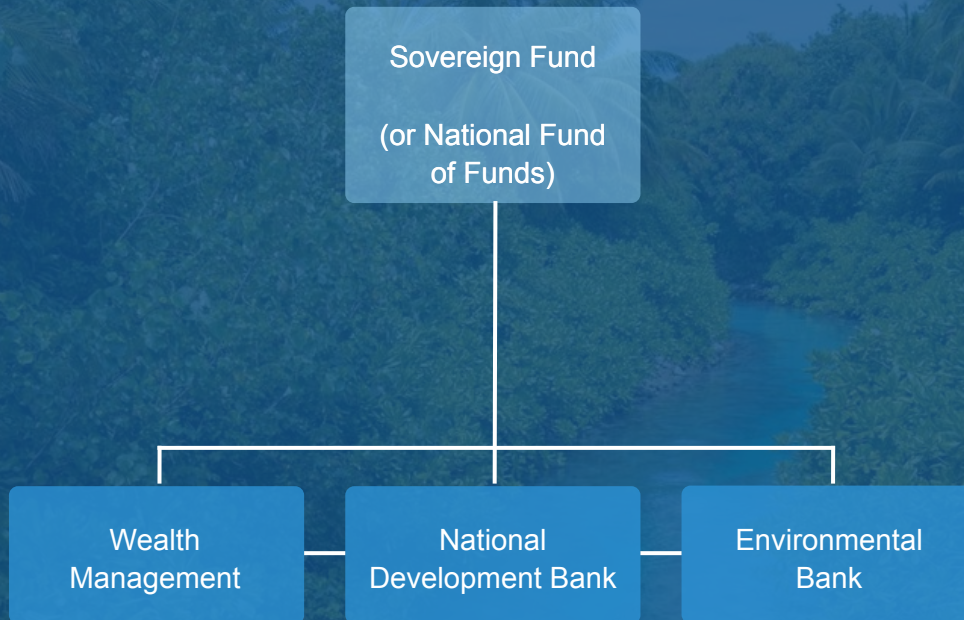
While Maldives has a Sovereign Development Fund, it is more likely that a Sovereign “Resilience” Fund would be met with greater international favor, given Maldivian vulnerability to Climate Change and the bureaucracy associated with global climate financing mechanisms.

And while the Maldives has an SME bank, a national development bank is one of the missing pieces in its financial architecture. The ability to fund infrastructure together with SME development, is critical for the success of the “integrated tourism” model which would see less leakage and more value remaining in the Maldivian economy. A national development bank that is part of a sovereign resilience fund could help meet this need.

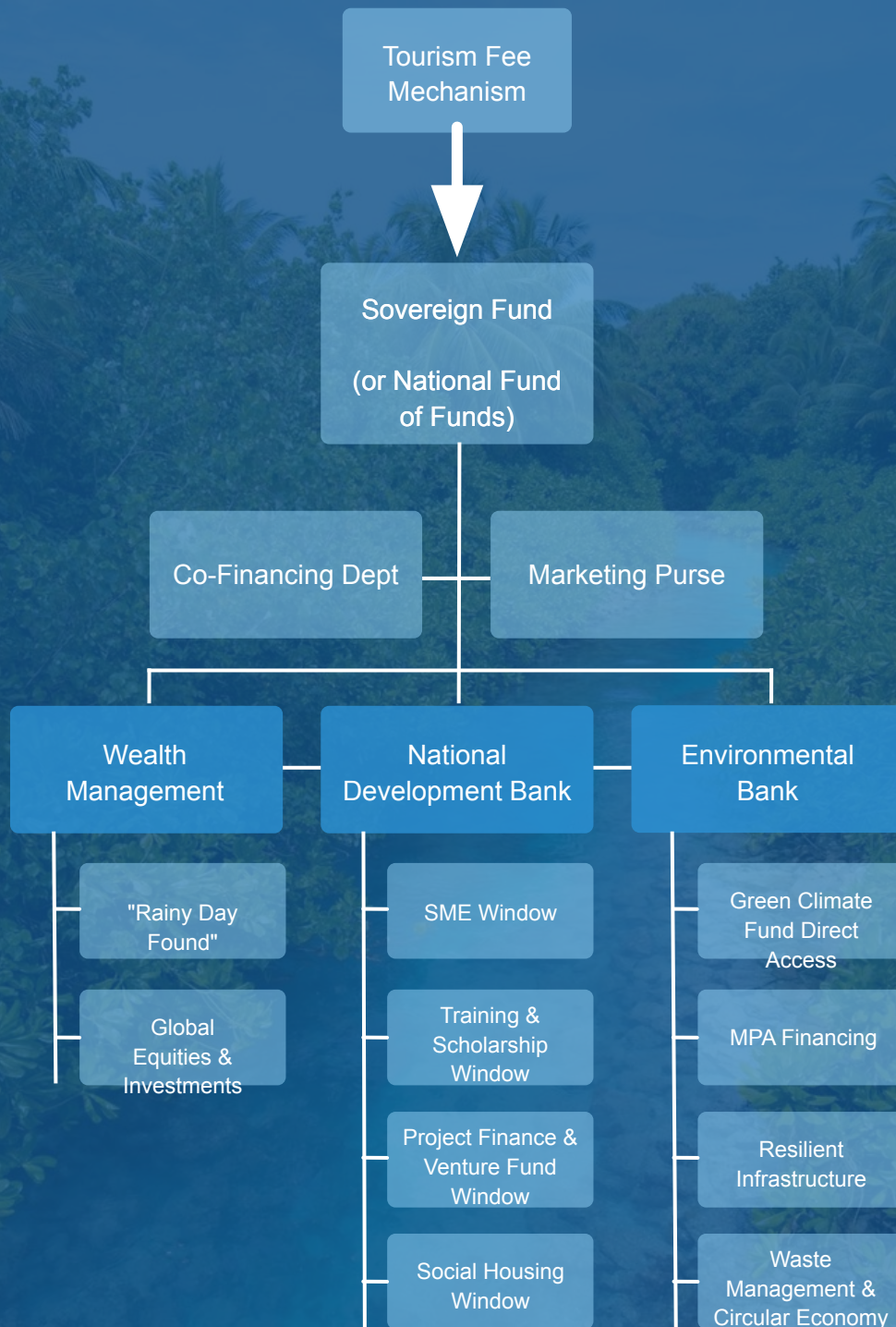


IATA could collect fees on tickets (as it does for other countries) and can be instructed to transfer these fees into the Maldives sovereign fund mechanism.

This mechanism can then act a “fund of funds” and disburse the funds into subsidiary banks / agencies in a transparent and prescribed ratio as set out by the government-of-the-day that designs and implements such a mechanism.



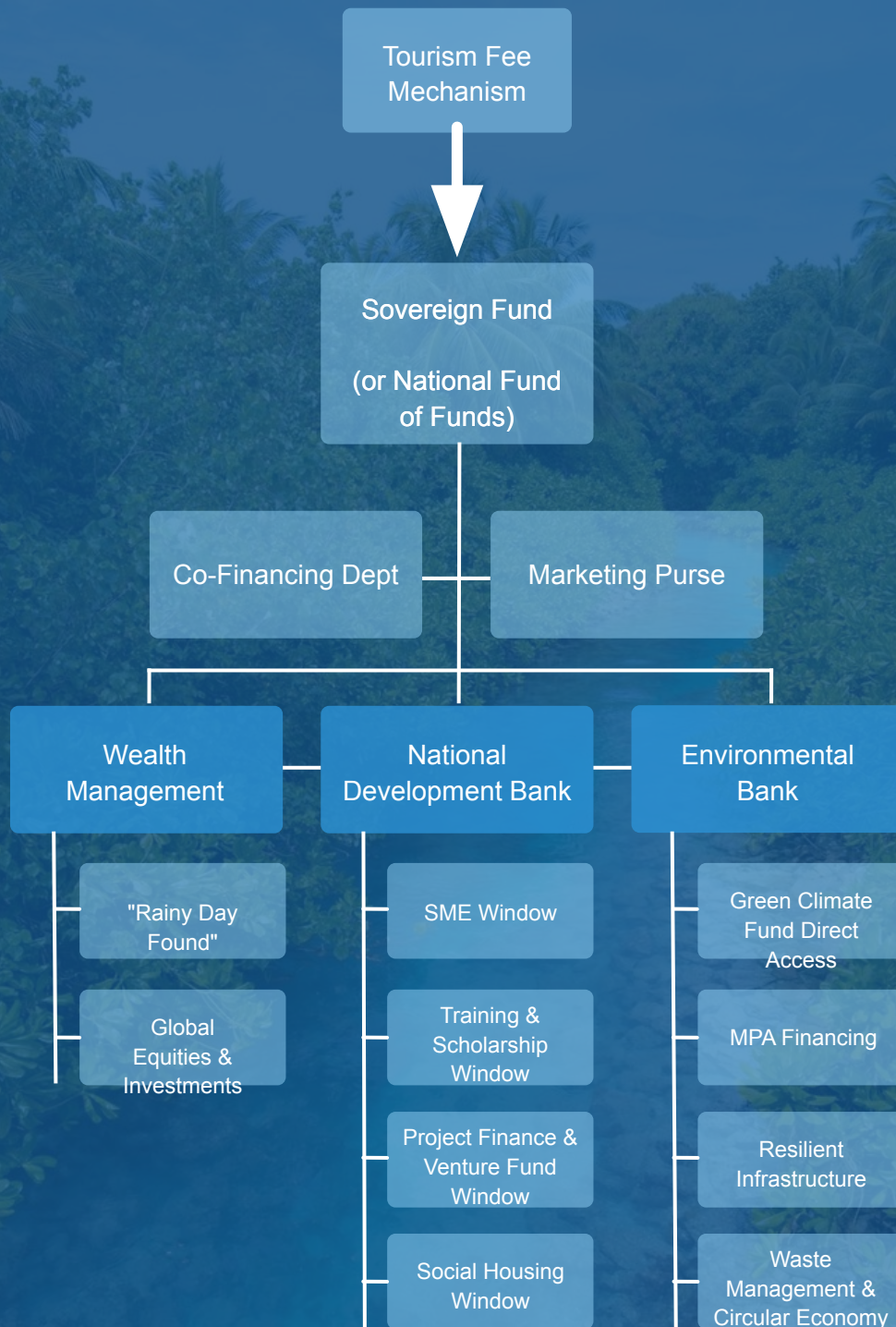
Wealth Management. Any sovereign wealth fund should invest in ways that preserve wealth while also setting aside resources for a rainy day. For example, Norway and some GCC countries have set up Sovereign Wealth Funds to ensure that oil wealth is translated into a more diversified portfolio of investments (a) to avoid boom and bust cycles (anti-cyclical) as well as to (b) position the economy for a post “peak-oil” world. Similarly, in the Maldivian context a “Wealth Management” arm could help achieve this.



Under a national development bank, key services could provide access to finance for: SME development (currently done by the SME Bank); training and scholarships; project finance; equity finance; mezzanine finance and finance for social housing.

Environmental Credentials. To ensure local and global acceptability of the mechanism, it is vital to anchor the “resilience” brand of the mechanism with a dedicated Environmental Bank or facility.

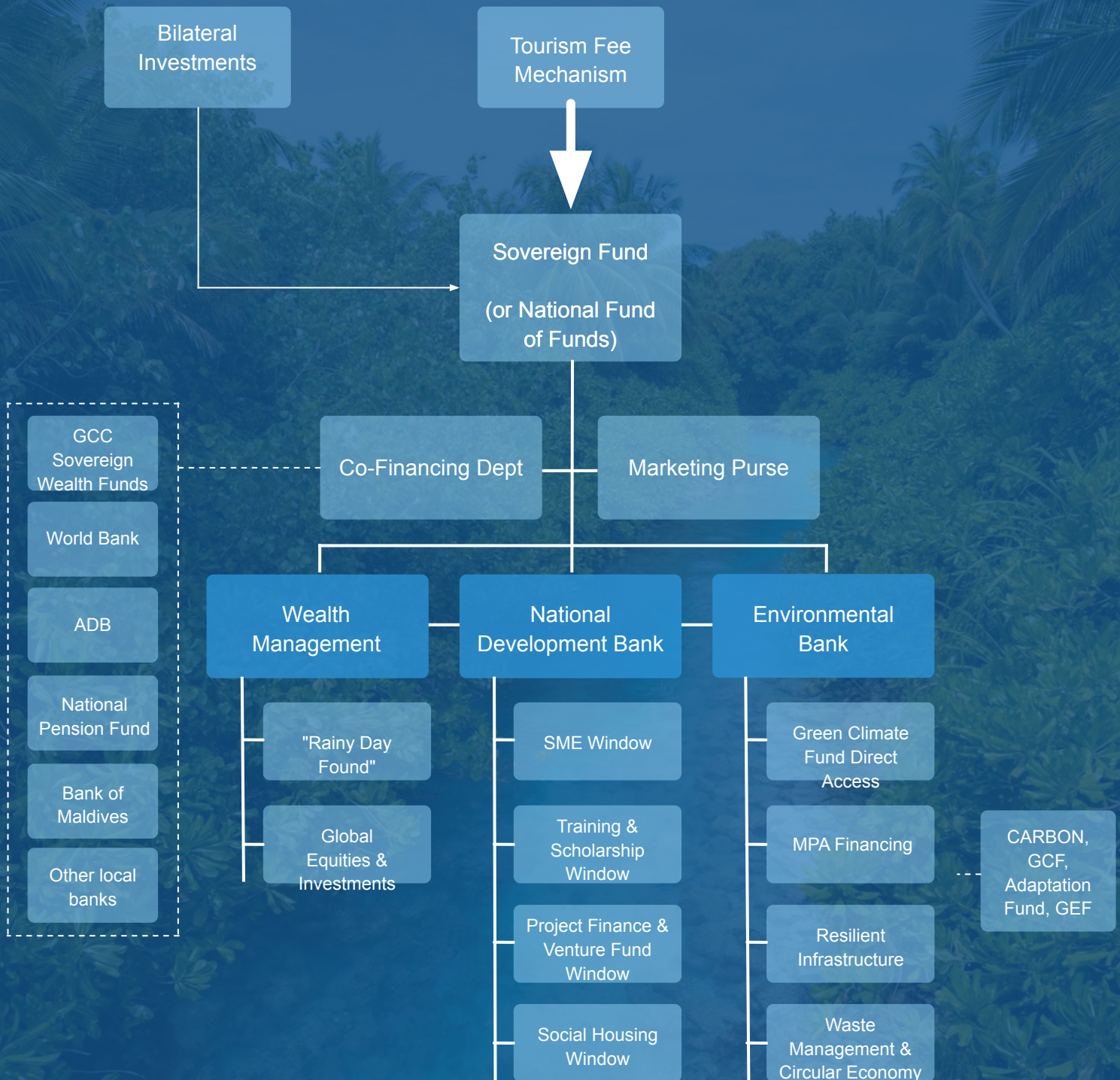
Under an environmental bank, key services could include: carbon financing, “direct access” to the Green Climate Fund as well as access to the Global Environmental Facility, Adaptation Fund, other Climate Funds. Financing for the management of the MPA could also fall into this department as well as financing for resilient infrastructure, renewable energy, energy efficiency, electric vehicles and waste management.



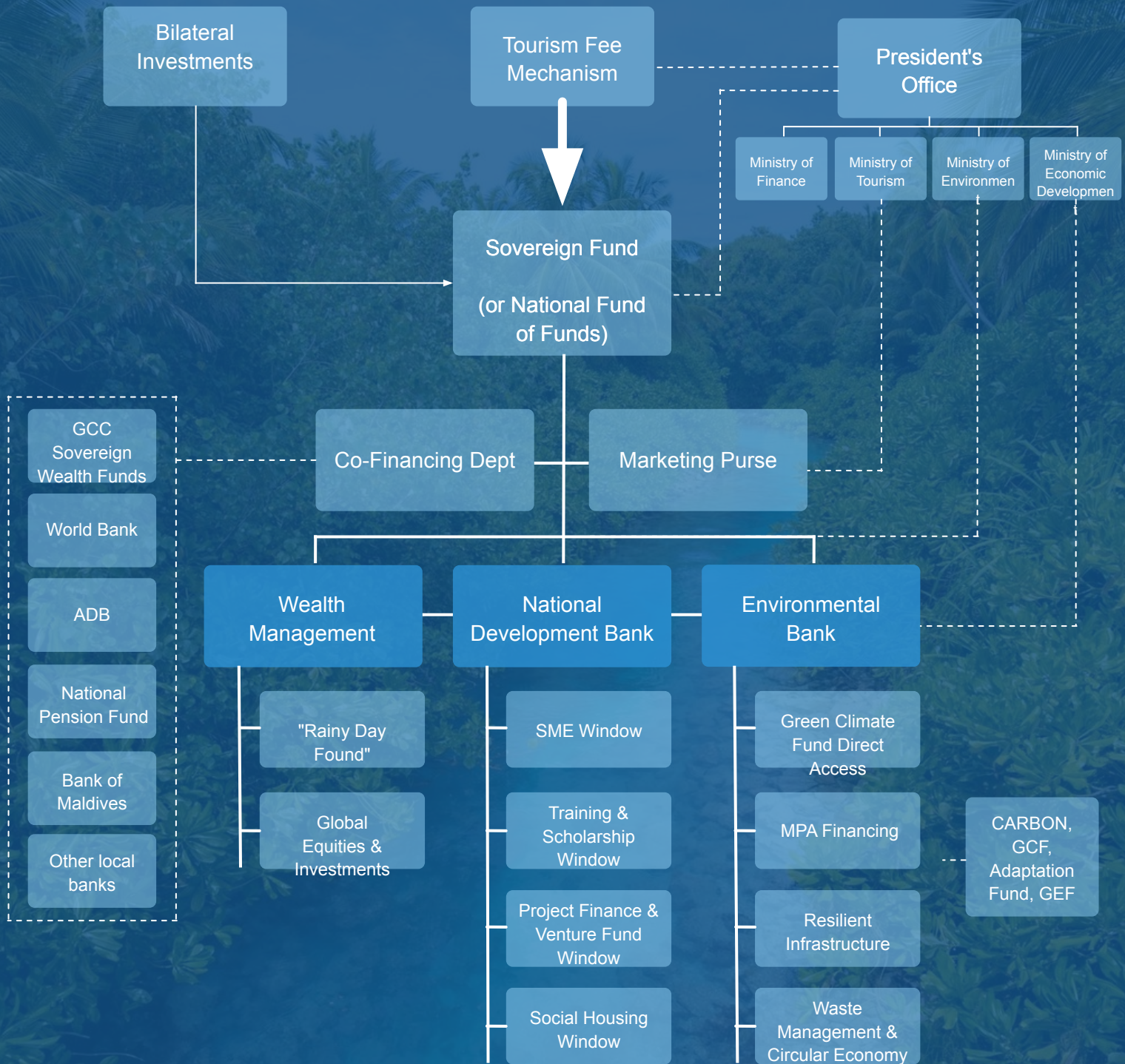
Marketing. The term, “marketing purse” is used as a placeholder. Given the importance of the tourism fees to such a mechanism, it would be vital for the hotel sector and the wider tourism industry to see that a transparent, predictable and dedicated stream of revenues is carved out for marketing tourism and for tourism “product” improvements.

This ensures that tourism arrivals continue to increase, further strengthening the viability financing mechanism.





Co-financing will be a critical function of the mechanism. A department dedicated to co-financing could help to leverage up the intrinsic and dollar values of the mechanism.



The President's Office and other key ministries (Finance, Economic Development, Environment, Tourism) would be essential for guiding the design of the mechanism.

Once the mechanism is established then the role of these Ministries could be largely for coordination purposes allowing a certain level of independence for the mechanism to help secure its standing in the international financial community. A high standing, will help to attract further funds from a range of other international sources.

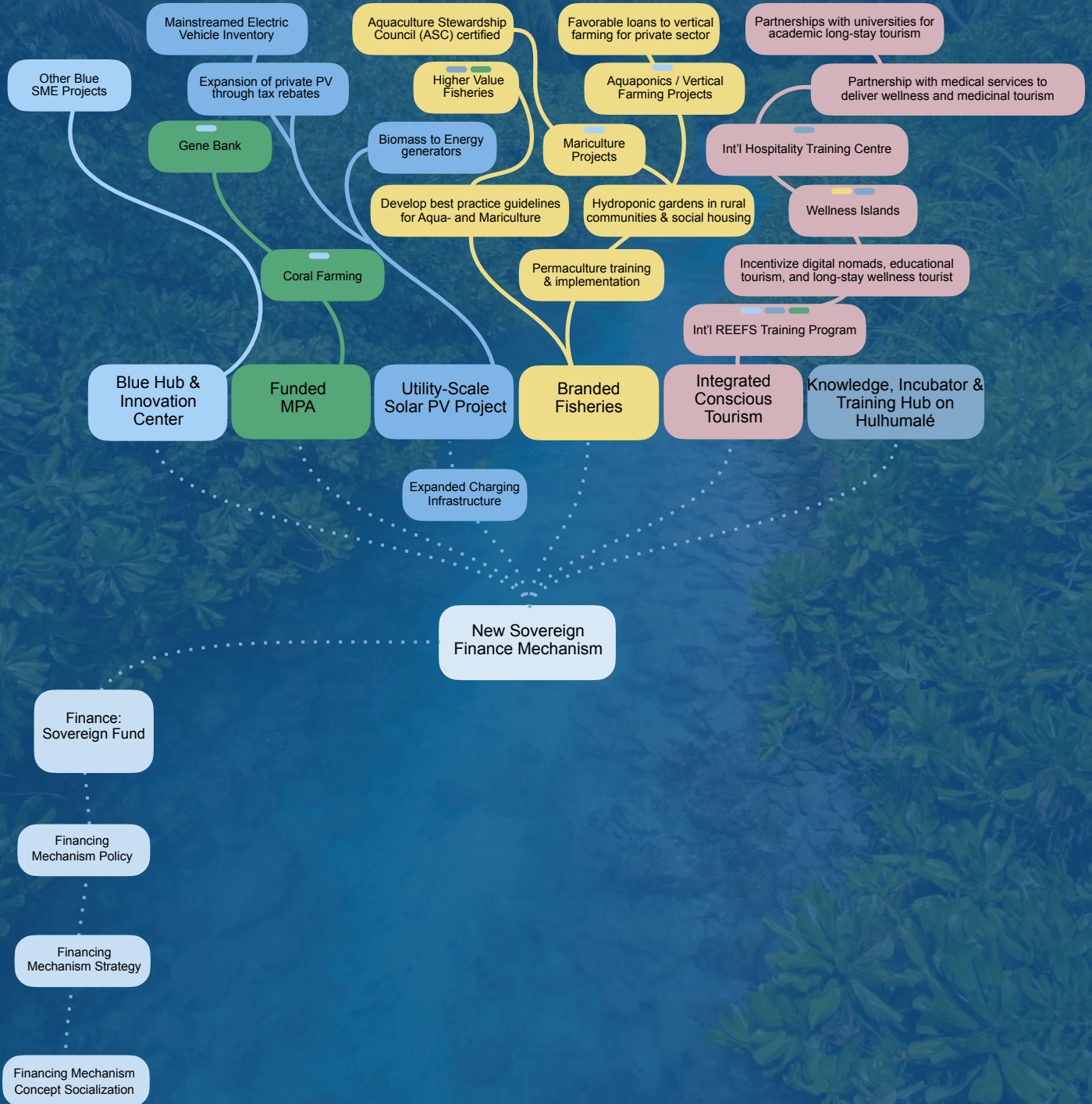
# Multi-Billion Dollar Sovereign Fund

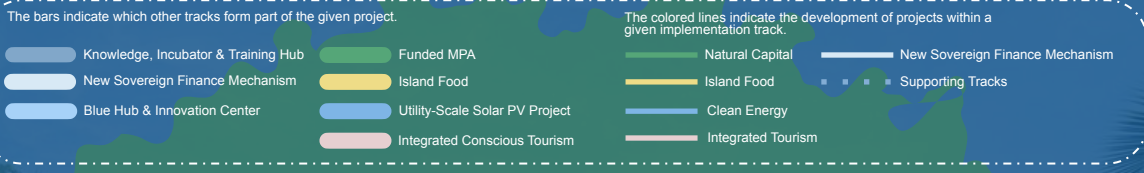
The integration of these ideas with the existing Sovereign Development Fund (or through a stand-alone entity) could be a major signal and potentially one of the first dominoes to catalyze a cascading sequence of events in the blue economy strategy to deliver on a range of blue economy projects that would help to diversify the Maldivian economy.



# Multi-Billion Dollar Sovereign Fund

The integration of these ideas with the existing Sovereign Development Fund (or through a stand-alone entity) could be a major signal and potentially one of the first dominoes to catalyze a cascading sequence of events in the blue economy strategy to deliver on a range of blue economy projects that would help to diversify the Maldivian economy.





Q4 2023  
Q3 2023  
Q2, 2023  
Q1 2023  
Q4 2022  
Q3 2022  
Q2 2022  
Q1 2022

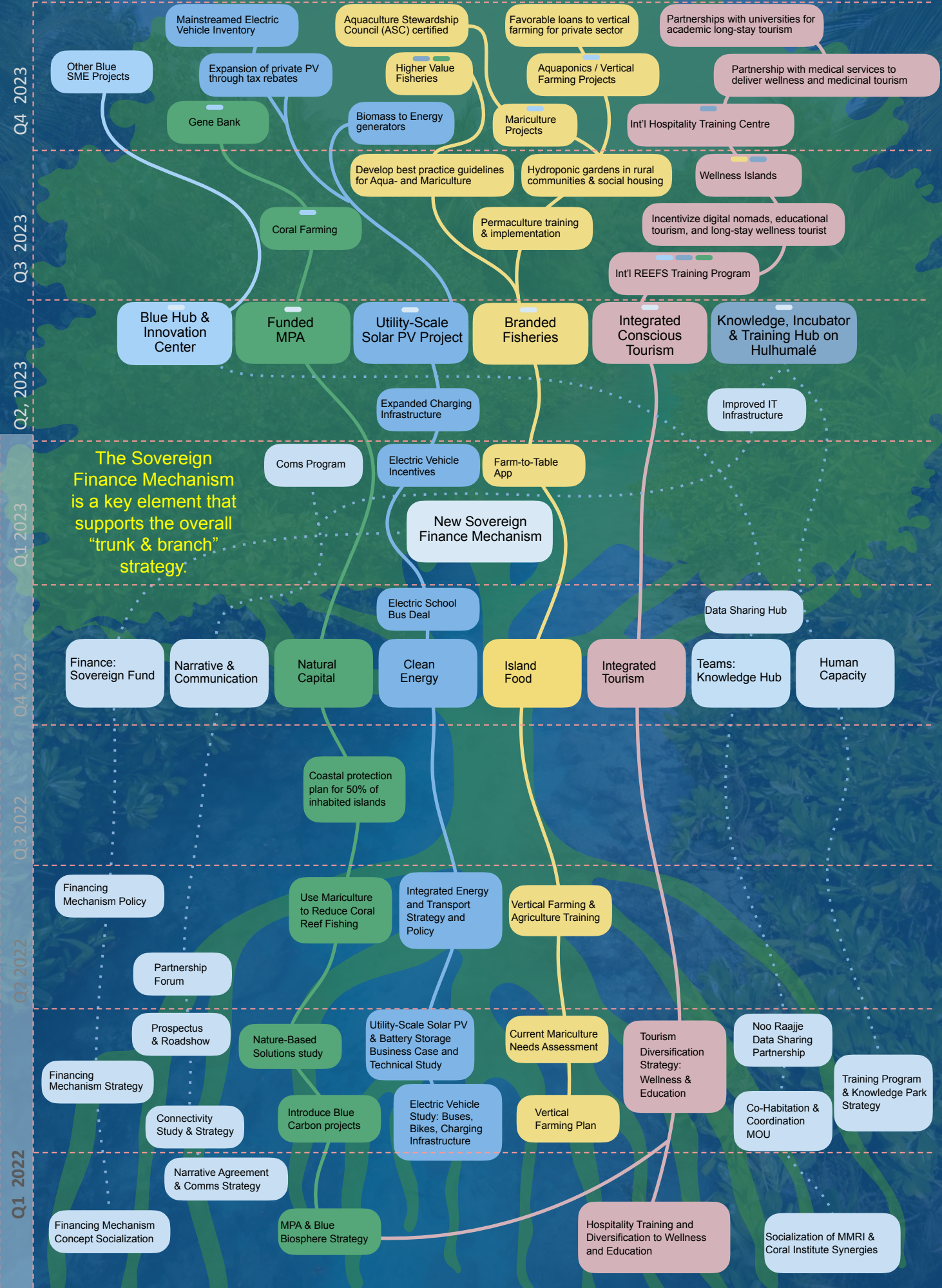
The Sovereign Finance Mechanism is a key element that supports the overall "trunk & branch" strategy.



The bars indicate which other tracks form part of the given project.

The colored lines indicate the development of projects within a given implementation track.

- Knowledge, Incubator & Training Hub
- New Sovereign Finance Mechanism
- Blue Hub & Innovation Center
- Funded MPA
- Island Food
- Utility-Scale Solar PV Project
- Integrated Conscious Tourism
- Natural Capital
- Island Food
- Clean Energy
- Integrated Tourism
- Supporting Tracks

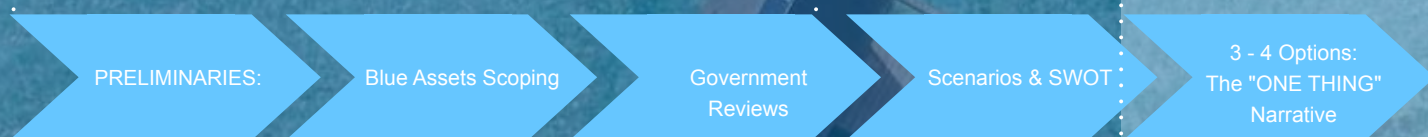


- High Level Strategy Update
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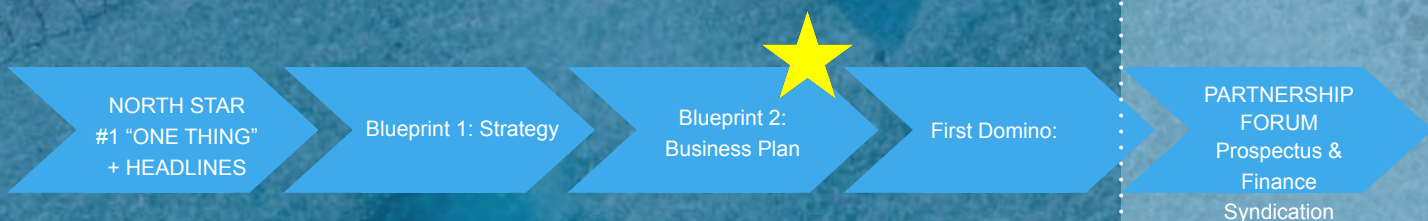
# 3 Phase Blue Economy Program

## Scope: The What

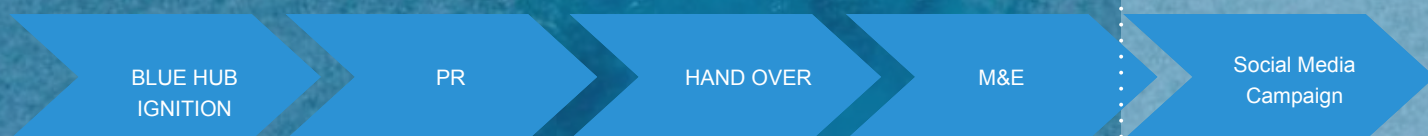
by  
UCLA & WI



## Shape: The How



## Accelerate: The Who & When



CORE  
DELIVERABLE  
S

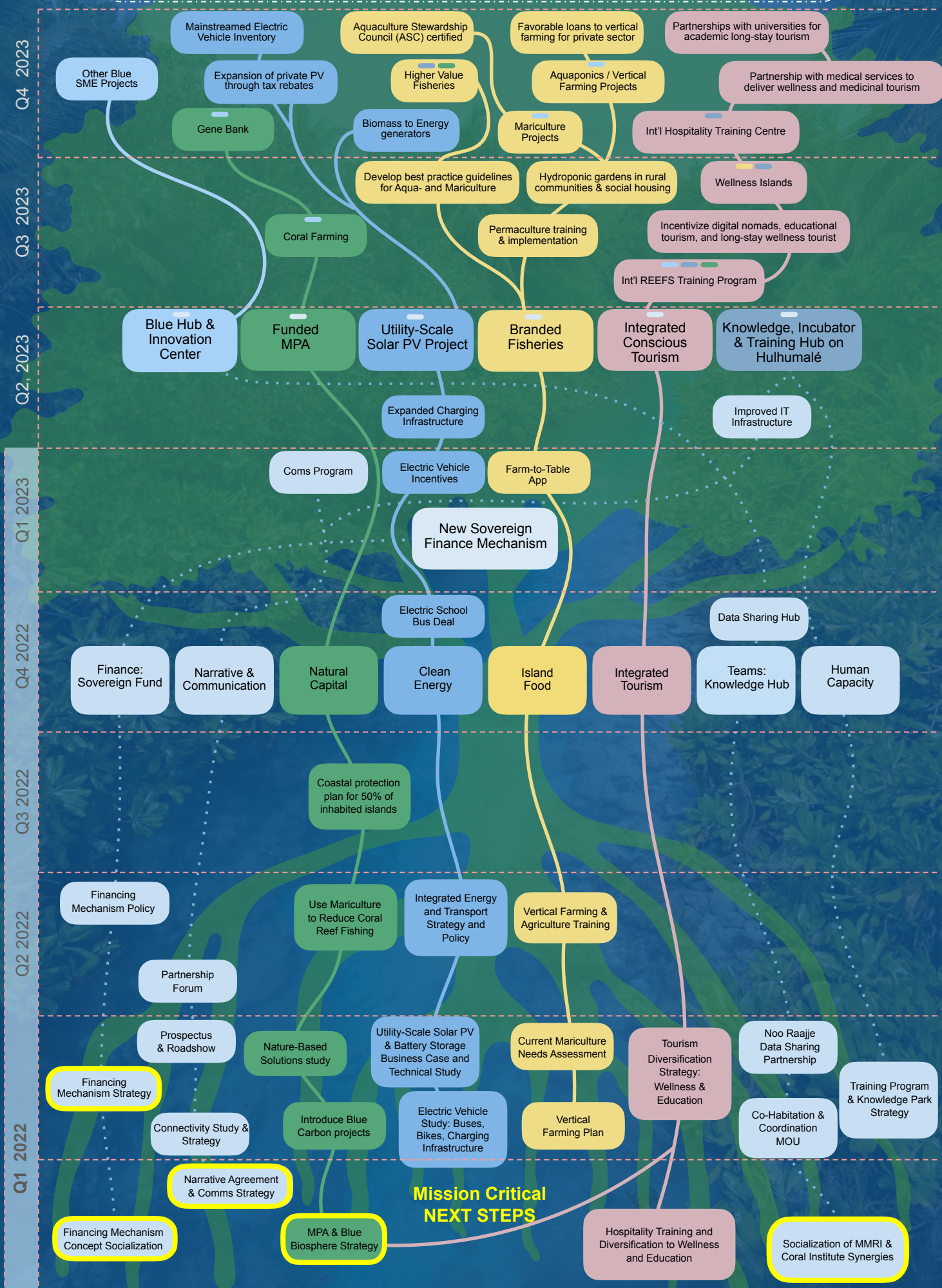
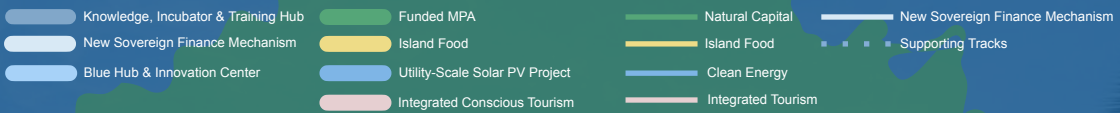
3 - 4 Options:  
The "ONE THING"  
Narrative

PARTNERSHIP  
FORUM  
Prospectus &  
Finance  
Syndication

Social Media  
Campaign



The bars indicate which other tracks form part of the given project.



## Suggested Next Steps

- 1 Fund Mechanism:** Consider merits of suggested sovereign funding mechanism and seek guidance and alignment with key Ministries. Develop more detailed concept & strategy.
- 2 Narrative & Communications:** Firm up the Narrative around the Smart Ocean State; develop comms strategy
- 3 Trunk & Branch:** Consider (and revise as needed) timelines on the trunk and branch strategy; socialize with Noo Raajje and align with key ministries
- 4 BE Working Group:** Establish BE working group to take responsibility for mission critical deliverables
- 5 Towards Investment:** Finalize Prospectus, Plan Roadshow and Partnership Forum