

Bangladesh

Climate Tech Landscape Research Brief
Country Snapshot





Climate Tech Investment Network (CTIN) provides investment syndication support services to local angel investment networks through a deal-flow centric platform to catalyze early-stage capital into climate tech startups in South and Southeast Asia.

This Research brief was made in collaboration with



Our Ecosystem Partners



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1 | COUNTRY OVERVIEW

High Level Economic Stats

GDP: _____

GDP per Capita: _____

Capital Controls: _____

**\$324.239 Bn
(2020)**
(Source: World Bank)

**\$1968.792
(2020)**
(Source: World Bank)

Inflation, consumer prices: _____

5.691% (2020) (Source: World Bank)

Sovereign Risk: _____

BB (Source: S&P)
Ba3 (Source: Moody's)

FDI Inflows (BoP, current in US\$): _____

0.631% (2019) (Source: World Bank)

Foreign Exchange Resilience (against US\$): _____

1.37% CAGR over 10 years

- Bilateral Investment and Taxation treaties: With **30 out of 190 countries** (Source: US Department of State)
- World Bank Ease of Doing Business Ranking: **168 out of 190 countries**
- Bangladesh is targeting to bring the World Ease of Doing Business ranking to double digits by 2025ⁱ. The country is constantly looking to bring in foreign investment. The sectors with active foreign investment include agribusiness, garment, leather, light manufacturing, electronics, energy and power, communications technology, plastic, healthcare, medical equipment, pharmaceutical, infrastructure, etcⁱⁱ.
- To promote local and foreign investment, there are 4 government bodies including The Bangladesh Investment Development Authority (BIDA) supervises and promotes all private investments in the country. The remaining 3 organizations are Investment Promotion Agencies BEPZA, BEZA, BHTPA. These agencies are tasked with promotion of investment through setting up of Export Processing Zones, Economic Zones and High-Tech Parks in Bangladesh. To facilitate foreign investment, the four government investment bodies have been mandated since 2018 to provide single-window services to local and foreign investors under the

Geographic and Demographic Stats

Population: _____

164 million
(Source: CIA World Factbook)

Youth% (15-24 years): _____

18.56%
(Source: CIA World Factbook)

Major Cities/Hubs: _____

Dhaka (Capital), Chittagong, Khulna, Rajshahi, Sylhet, Bogra
(Source: CIA World Factbook)

Youth Unemployment (15-24 years): _____

12.8%, Ranking, 107 out of 190
(Source: CIA World Factbook)

Languages Spoken: _____

Bangla (Majority)
(Source: CIA World Factbook)

Population completed tertiary education (25+ years): _____

10.138 million (2019)
(Source: World Bank)

2 | Overview of Climate Change in Bangladesh

Introduction

Bangladesh has historically been one of the most vulnerable countries to the effects of Climate Change. Given its location and topography, the country has in the past been exposed to extreme weather, especially flooding (80% of the country's surface forming a giant floodplain), storm surges, cyclones etc. Compounding this further is the country's high socio-economic vulnerability which increases the climate risk due to a high population density, and a higher-than-average dependence on agriculture.

The country has made combating climate change an important part of its planning, being heavily featured in its five-year future planning initiatives. Bangladesh has also ratified the Paris agreement in 2016 and has submitted its Nationally Determined Contributions (NDCs) where the country looks to reduce GHG emission by 15% from power, transport and industrial sectors on a conditional basis. A total of \$40 billion would need to be invested between 2015 and 2030 to fulfil its NDCs and SDGs.

High Level Climate Change Stats



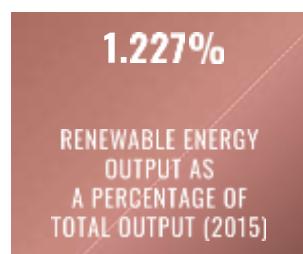
Source: German Watch



Source: German Watch



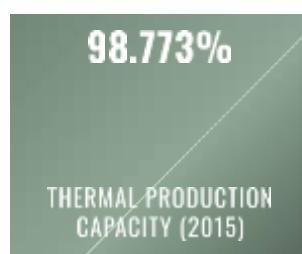
Source: German Watch



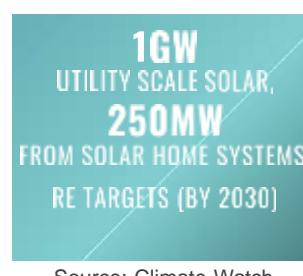
Source: World Bank



Source: Climate Watch



Source: World Bank



Source: Climate Watch

5 | Key Climate Stakeholder Profiles

Key Investors in Climate Change^{iv}

Names/Logos	Classification	Investment Sector
Green Climate Fund	Government	Gender equality, environment, education, financial inclusion
BD Ventures	VC	Clean Energy, Healthcare, IT solutions
responsAbility	Venture Debt	Climate finance, financial inclusion, sustainable food
Impact Investment Exchange	VC	Climate change, Gender Equality, Base-of-Pyramid
B-Briddhi	VC	Future Mobility, Energy Access, Women focused businesses, Healthcare etc.
SEAF	VC	Clean Energy, Telecom, Gender equality
Truvalu	VC	Agriculture, Food
Incluvest	VC	Agriculture, Food, Affordable Housing
Bangladesh Angels	VC	Sector Agnostic
TheSteps.org	VC	Impact in general
Aavishkaar Capital	VC	Impact in general

Key ESOs in Climate Change^{iv}

Name/Logos	Classification	Focus
LightCastle Partners	Accelerator	Sector Agnostic
YY Ventures	Hybrid	Impact in general
BYLC Ventures	Hybrid	Impact in general
Toru Institute	Hybrid	Impact in general
Urban Innovation Challenge	Accelerator	Impact in general
YY Goshthi	Accelerator	Impact in general
YGap	Accelerator	Impact in general
Brac	Hybrid	Impact in general

Key Corporates in Climate Change^{iv}

Name	Type/ Classification
Omidyar Network	Through its subsidiary, Flourish Ventures, Omidyar Network supports fintech solutions, focused on providing a fair and also green financial ecosystem
Syngenta	Being a big player in the agricultural sector, Syngenta, through its foundation has been supporting agritech startups that not only focuses on the overall impact on farmers but also on the efficient use of resources like water in the agricultural sector.

Startup Profiles

Company	Year Set-Up	Sector	Sub-Sector	Sub-segment
	2018	Circular Economy	Natural Resources	Water



Hydroquo+ utilises a unique product suite to improve water quality and reduce losses

Business Model: DaaS enables users to only pay for the final analytics they wish to receive instead of purchasing and maintaining the equipment themselves. This allows the company's clients to outsource KPI's for data collection, delivery and verification further making it easier to forecast budget expenses, plan ahead, and over time, offset the cost of the device.

Innovation: As Bangladesh's first Hydro-Informatics startup, it develops, designs and executes specialist consultancy projects in the field of water quality monitoring and hydrological modelling to mitigate water-related challenges and their potential implications on infrastructure, lives and livelihoods in real-time.

Last Funding Round: Currently raising \$250,000 in a convertible note

Investors: Bootstrapped

Company	Year Set-Up	Sector	Sub-Sector	Sub-segment
	2014	Circular Economy	Waste to Resources	Waste Management (non-plastics)



Reverse Resources is a SaaS platform to map, match and trace waste from textile factories to recycling and help fashion brands achieve full circularity by 2030.

Business Model: One or multiple revenues streams from each tonne of waste registered on RR platform:

- Factory: 0.01 USD/kg of waste traced to circulation
- Waste handlers: 5-10% transaction fee
- Recyclers: 0.01 USD/kg of waste verified from source
- Brands, supplier HQs, buying houses: 50-100 USD/facility of waste generation monitored

Innovation: RR platform is a central platform for brands, recyclers, waste handlers and textile manufacturers offering win-win business incentives around improved waste circulation.

Last Funding Round: \$1.2 million convertible note with \$5.9 million valuation cap.

Investors: Fashion For Good

Recent Deals

Start-up	Sub Segment	Detail	Funding Round	Year	Investor
Me-SOL-share	Energy Access	SOLshare has created a revolutionary new approach to bring affordable solar electricity to everyone. In addition to a battery-leasing model for electric rickshaws.	Undisclosed	2020	Innogy New Ventures, IIX Impact Partners, EDP Ventures
Reverse Resources	Clean Industry	Reverse Resources is a tracking and trading platform for textile waste, providing 360 degree transparency of the waste flows.	Convertible Note	2020	Fashion For Good

Local Angel Investor Quotes

Ahmed Jawad Yusuf

Bangladesh Angels

"Historically, the majority of clean tech investors in Bangladesh have been international/foreign funds. The key to unlocking the true potential of blended financing schemes, impact linked investments, and mezzanine capital in Bangladesh is the combination of both local & foreign climate conscious investors. This means leveraging local angel groups, local government funds, local institutions and family offices with Bangladeshi origins/roots to consider consistent deal flows in the sector. To successfully & materially catalyze investments in the space, these investors need to also keep first loss provisions and long-term capital allocation in mind for successful early-stage investment deployments to even follow-on funding rounds."

Nazat Chowdhury

Head of IT - Save the Children BD (Angel Investor)

"I am a firm believer in Peter Drucker's maxim "Every single social and global issue of our day is a business opportunity in disguise." Climate crisis is the largest global challenge of our time and decades to come. I am investing in CleanTech startups who are tackling climate issues head on with scale able, cost-effective solutions, with founders having deep knowledge, experience and network in the sectors they are targeting. I am confident climate conscious investing is not only the right thing to do, it is good business."

6 | Key Takeaways

1 Positive policy measures on improving ease of doing business and foreign investments

Bangladesh is actively looking to encourage foreign investment and bring its ease of doing business ranking to double digits by 2025. To encourage foreign investment, the government has set up one-stop services to facilitate transactions within Export Processing Zones, Special Economic Zones, High-tech parks etc.

2 High climate change risks and vulnerabilities warrant more climate tech solutions

Bangladesh features in the top 10 on the Climate Risk Index and is significantly higher than its neighbouring countries. This is due to the increased flooding risk where 80% of the country's surface is considered a flood plain. Other factors include the country's high population density (10th most densely populated country in the world) as well as its above average dependence on the agricultural sector.

3 Focused climate policy and action in the climate change space, especially in solar power

As a result of high climate risk, Bangladesh has made sure to incorporate climate action in its planning strategy and budgeting. The main focus is on reducing GHG emissions and increasing solar power capacity. Climate change initiatives have been incorporated within its short term (5-year strategy) as well as its long-term strategy through NDCs and beyond. The country looks to focus on conditionally reducing GHG emissions by 15% by 2030, as part of its NDC commitments. There is a strong push to develop its solar power capacity and improve the renewable energy production (currently at ~1% of the total energy mix)

4 Strong government interest in creating infrastructure and ecosystem for startups to thrive

Bangladesh has focused on supporting the local startup ecosystem extensively within the last 5 years by setting a strong supporting foundation for startups to thrive. The government has majorly been focused on providing the infrastructure that will help the startup ecosystem including the launch of the Bangladesh Startup Fund. The Bangabandhu satellite and data centers have given startups access to high quality data and connectivity.

5 Opportunity for more local investors to support startups, especially in the climate tech sector

Startup investments in Bangladesh majorly come from foreign sources and there has been no change in this trend over the last 5 years. 92% of investment has been coming from foreign sources over the last 5 years and local investment for startups in 2021 only makes up 7.2% of the total investments made this year. This could be due to the still nascent startup ecosystem which showcases the opportunity for the ecosystem to grow. Coupled with the need for climate focused investment as a result of Bangladesh's high climate risk, investment is needed to encourage more innovation to battle climate change in Bangladesh

Endnotes

(All data as accessed on 10th September 2021)

- i. <https://www.lightcastlebd.com/insights/2021/06bangladesh-startup-ecosystem-report-2021>
- ii. <https://www.state.gov/reports/2021-investment-climate-statements/bangladesh/>
- iii. <https://www.government.nl/binaries/government/documents/publications/2019/02/05/climate-change-profiles/Bangladesh.pdf>
- iv. <https://www.lightcastlebd.com/insights/2021/08/apprehending-the-impact-investment-landscape-of-bangladesh>
- v. <https://www.lightcastlebd.com/startup-dashboard>