CLIMATE FINANCE NAVIGATOR TOOLKIT

A Practical Toolkit for Increasing Climate Finance Readiness of Impact Enterprises

D-BRIDDHI
Scaling Impact Enterprises of Bangladesh

Climate Finance Navigator Toolkit

A Practical Toolkit for Increasing Climate Finance Readiness of Impact Enterprises

B-BRIDDHI
Scaling Impact Enterprises of Bangladesh

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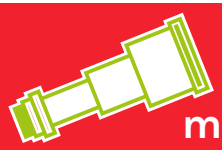
STAGE 1  Understand and measure climate impact

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ABOUT THE NAVIGATOR

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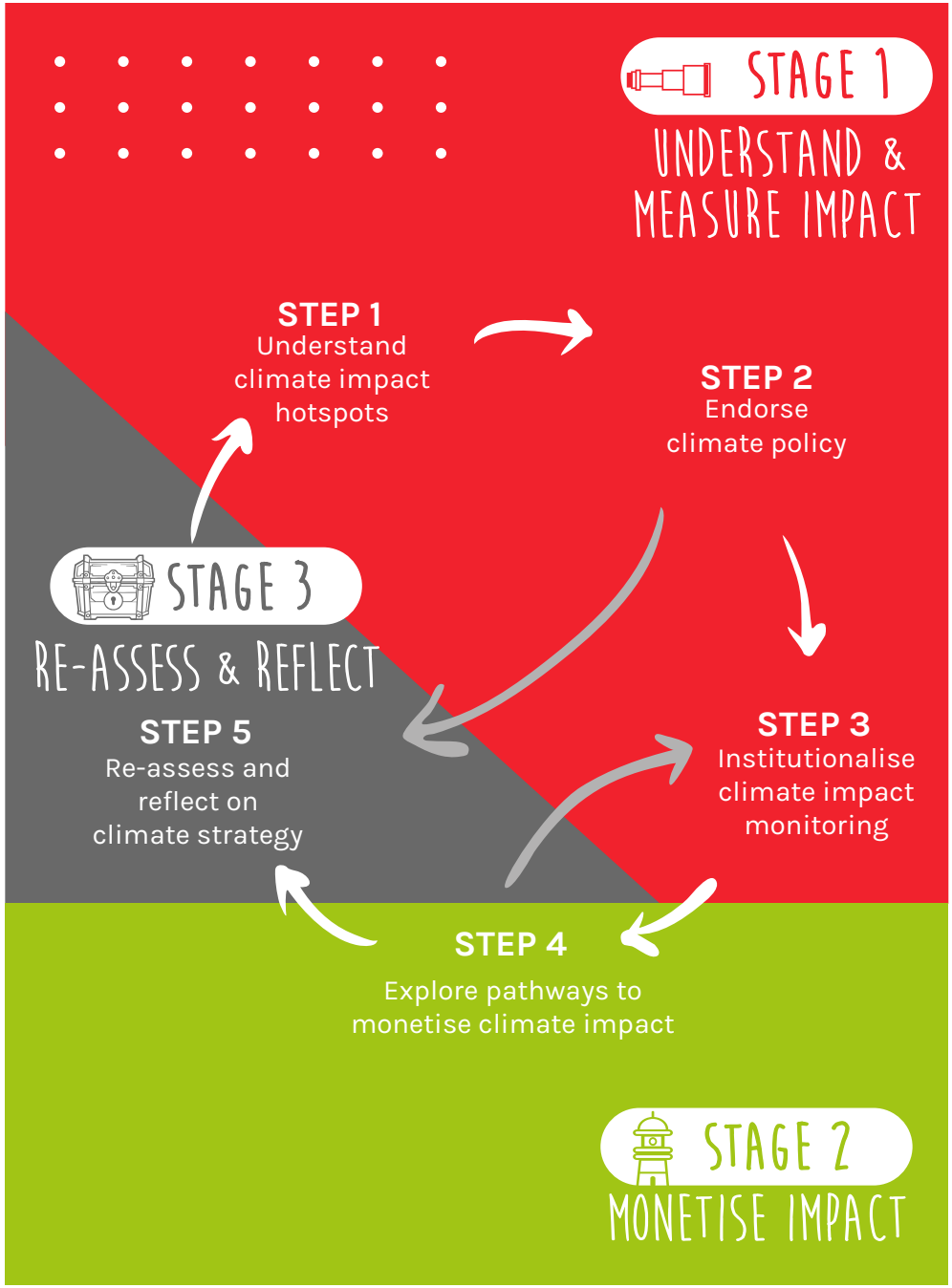
This navigator was developed for impact enterprises operating in Bangladesh. It provides a structured approach for your company to better understand its climate impact and includes tips and tricks about how you can start establishing initial rough estimates and then work your way to a more robust climate impact management and monitoring system.

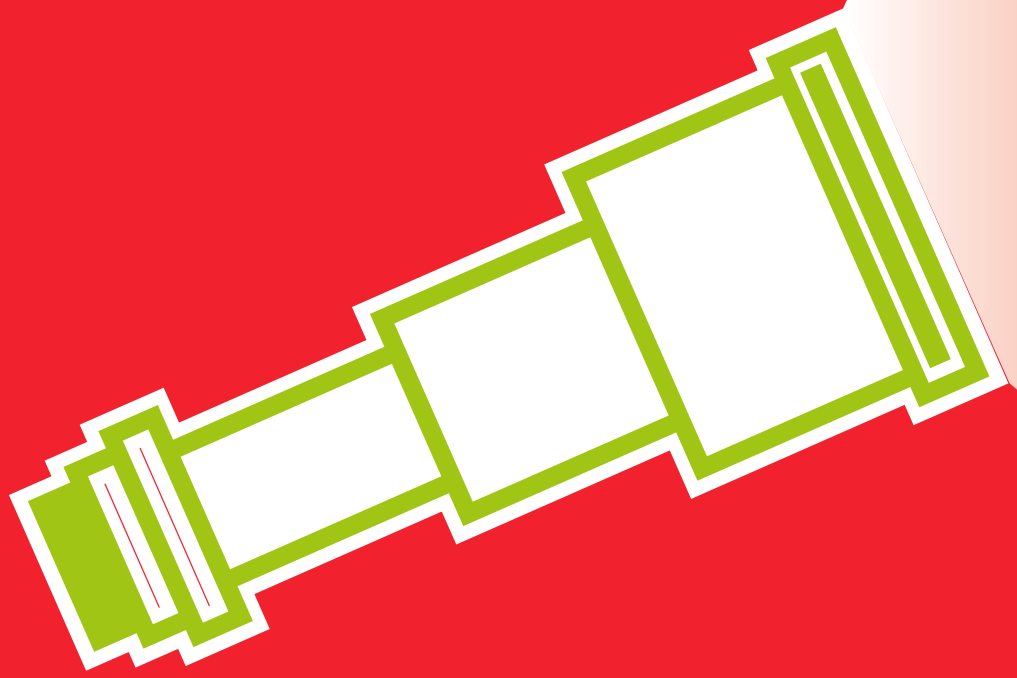
You can use the navigator to identify whether climate impact is important for your enterprise within just a few hours. For those impact enterprises that identify that climate is not a priority, no further actions are required to further refine climate impact measurements - at least not at this point.

For impact enterprises for which climate impact is a priority, the navigator provides recommendations about monitoring and reporting the company's contributions to mitigate and adapt to climate change. Having data available that demonstrate your climate impact, will prepare your company to explore different climate finance pathways - guided by a decision tree, checklists and a resource library that are provided as part of this toolkit.

It is recommended to study the *'Carbon Finance Market Scoping Report'* before starting with the climate finance navigator.

Recommended focus: Go rather quickly through step 1 and step 2, and focus on step 3 and step 4.





STAGE 1

UNDERSTAND AND MEASURE CLIMATE IMPACT

STEP 1

UNDERSTAND CLIMATE IMPACT HOTSPOTS

OBJECTIVES

Get ready to describe your company's climate impact to stakeholders: understand positive and negative impacts, identify emission hotspots that are most relevant for further investigation, and put them into a broader perspective.

REQUIRED RESOURCES

This can vary considerably: for some impact enterprises this first step can be completed within a few hours by e.g. a "climate task force" delegated by the management, while bigger companies with more complex operations may spend a couple of days. Some companies may even opt to engage an external consultant to facilitate a workshop or a series of meetings with management and technical team members to complete this first step.

OUTPUT

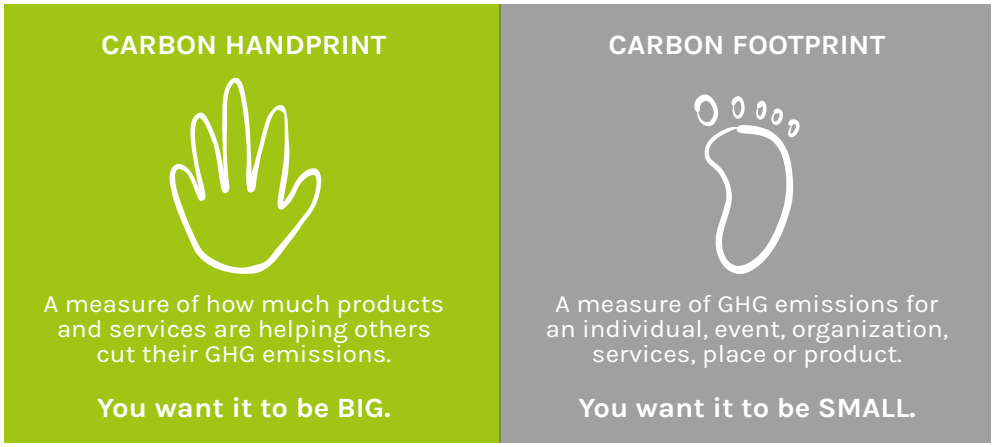
The deliverable of the "climate task force" is a recommendation to the company management about which climate impact areas to focus on (if any): carbon footprint, carbon handprint or climate adaptation (see 'wrap-up step 1' below).

Recommended focus: Most impact enterprises in Bangladesh will likely have the biggest climate impact with their "carbon handprint"!

To get ready for climate finance, you must understand your company's climate impact and be able to conclusively describe these impacts to your team, clients and partners. To describe your impact, you can use the following terminology:

- Carbon footprint is the quantification of greenhouse gas (GHG) emissions from your own operations and from upstream and downstream activities.
- Carbon handprint is the quantification of the climate impact achieved through your products and services that help others to reduce their carbon footprint.

Carbon footprint and handprint are typically expressed in metric tonnes of carbon dioxide equivalents (tCO2eq). While the footprint refers to tCO2eq emitted (the smaller the better), the handprint refers to tCO2eq reduced (the bigger the better). Once you know the relative importance of your carbon footprint and handprint, you can decide whether to track either one, both, or neither of them (see step 2 of this navigator). Impact enterprises in Bangladesh are expected to have the biggest climate impact with their "carbon handprint".



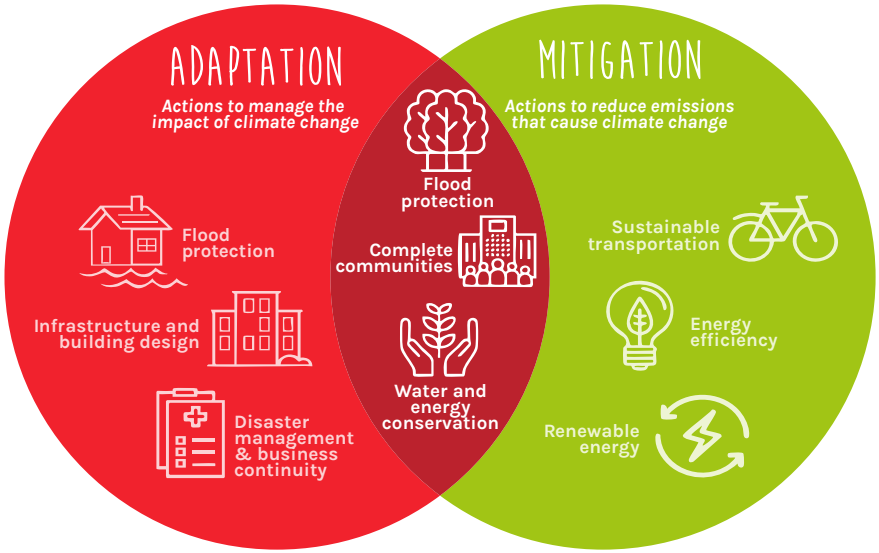
One company's carbon handprint helps reduce the caron footprint of another.

Credit: Neste, resource library [1]

Further, some impact enterprises may not primarily aim at reducing the amount of GHG emissions but rather support the adaptation to climate change impacts by providing suitable products and services. To describe your climate impact, it is important to specify which of the two broad groups of climate action you are contributing to:

- Mitigation is about reducing, removing or avoiding carbon emissions. For example, reducing the carbon footprint and increasing the carbon handprint are climate mitigation measures.
- Adaptation aims at reducing the vulnerability of natural and human systems against actual or expected climate change effects (such as floods, droughts and sea-level rise).

In the following subsections, you will find tips and tricks about how to estimate the carbon footprint of your company, how to estimate the carbon handprint of selected products and services, and how to describe your climate adaptation activities.



Credit: ICLEI Canada, resource library [2]

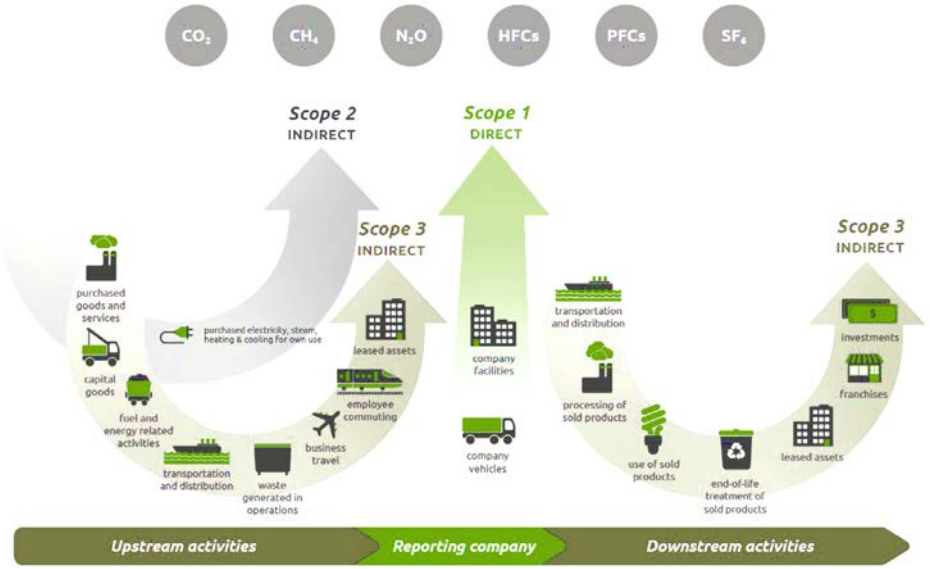
ESTIMATE CARBON FOOTPRINT

Companies' emissions can be categorised as scope 1 (direct emissions from direct operations), scope 2 (indirect emissions from direct operations) and scope 3 (indirect emissions from upstream and downstream activities). The *GHG Protocol*

provides standardised guidance and tools for the private sector to measure and manage GHG emissions, see *resource library [3] and [4].*

As a first step, transparently define the "operational boundary" of your company to clarify what facilities (e.g. offices, manufacturing plants, warehouses, shops), equipment and vehicles to include under which scope. You can do that by preparing an overview of all your company facilities and vehicles and clarify whether they are under the direct control of your company and therefore included in scope 1 and scope 2. If they are leased or operated by someone else, you may decide to include them in scope 3. Having this overview at hand will be useful when going through the next steps.

As a second step, you can use *Activity 1* and *Activity 2* to get a first rough overview of your company's carbon footprint. You may also want to use a free GHG calculator for triangulating the results *(see Activity 2)*. For now, the focus is on identifying carbon hotspots in your operations.



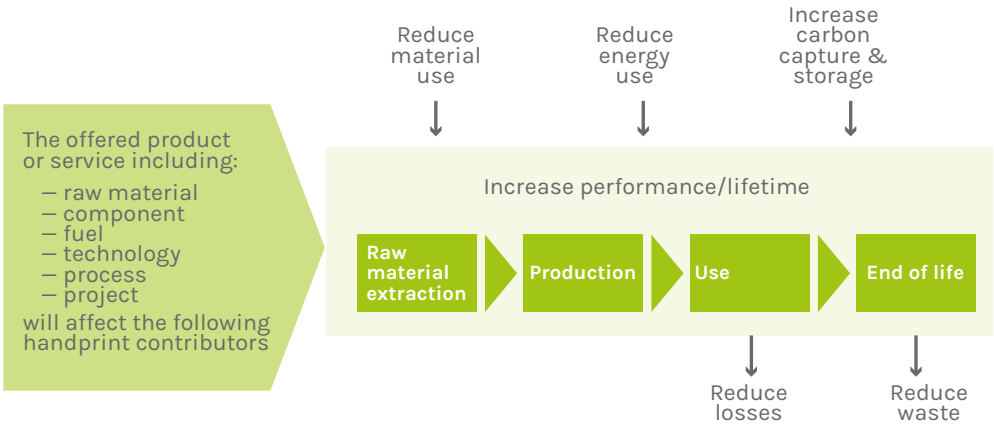
Credit: Greenhouse Gas Protocol, resource library [4]

Most impact enterprises in Bangladesh likely have relatively small carbon footprints from scope 1 and scope 2. While it is still good to understand and minimise direct GHG emissions, if your emissions are less than approx. 500 - 1000 tCO2eq per year the reduction potential within your direct operations is unlikely to attract climate finance.

ESTIMATE CARBON HANDPRINT

Even relatively small organizations can have a big carbon handprint and therefore expected to be most relevant for impact enterprises in Bangladesh. The carbon handprint is usually calculated for a specific product or service that reduces the GHG emissions of others, for example, a business or a household. The handprint is a comparison between business-as-usual ("baseline") and a scenario when your company's solution is used ("project scenario"). Emission reductions may originate from reduced material use, reduced energy use, increased carbon capture and storage, reduced losses, reduced waste, or increased performance/lifetime.

For now, the objective is to get an estimate in the right order of magnitude of the potential emission reductions. *Activity 3* helps you to understand if your company could possibly reach an emission reduction potential of at least 30,000 tCO2eq per year, which is a rough minimum threshold for the project size of commercially viable carbon projects.



Credit: Greenhouse Gas Protocol, resource library [4]

Recommended focus: identify if any of your products or services has an emission reduction potential of several 10,000 tCO2eq per year.

DESCRIBE CLIMATE ADAPTATION ACTIVITIES

There is also scope for accessing climate finance if the products and services of your impact enterprise contribute to climate adaptation - also if there are no direct GHG emission reductions associated with these activities. There are opportunities and expectations for the private sector to engage in climate adaptation activities, see *resource library [6].*

Examples:

- An impact enterprise offers an app that helps smallholder farmers to adapt crop selection and planting cycle based on localised climate change forecasts. This information helps farmers to optimise their harvest (and income) despite changing climate patterns.

- An impact enterprise provides safe drinking water to communities affected, for instance, by seawater intrusion. Despite changes in the water quality in private wells caused by climate change, communities keep having access to safe drinking water.

If you expect that climate adaptation is relevant for your company, have a look at *Activity 4* and screen the National Adaptation Plan 2023 - 2025 (NAP) of Bangladesh, see *resource library [7]*. The NAP of Bangladesh specifically mentions that "relevant authorities will introduce attractive incentives and innovative financing instruments for the private sectors".

Describe the climate impact hotspots of your impact enterprise!

Select one or several of the climate impact areas that you want to explore in more detail.

◯ **Carbon footprint**

`What are the three most important emission sources in your footprint?

◯ **Carbon handprint:**

What is the product or service with the highest emission reduction potential?

◯ **Climate adaptation:**

What product or service contributes most to climate adaptation efforts in Bangladesh?

◯ **None of the above - climate impact is of minor importance for my company**

STEP 2

ENDORSE CLIMATE POLICY

OBJECTIVES

Informed by the findings of step 1, come up with a company-internal decision about the level of importance to be given to climate impact, and develop and endorse the company's climate policy.

REQUIRED RESOURCES

A couple of hours by the management (and possibly the board) to review the first estimations of the company's climate impact and decide on the way forward. Some time will also be needed by the climate task force to support the process.

OUTPUT

Decisions taken by the management about the company's climate strategy *(see 'wrap-up step 2').*

Recommended focus: decide if climate impact is relevant enough for your company to refine monitoring and explore climate financing.

In this step, based on the inputs and recommendations provided by the "climate task force", the management needs to decide what priority the company wants to give to climate impact:

Decision points	Factors to support decision making	Implications
DECISION #1: Endorsement of climate policy? Decide whether your company wants to develop a climate policy.	○ Aspiration by company team to align business operations with implications of climate change. ○ Requests by clients and investors to describe the company's position and actions related to climate change.	In case of a positive decision, have a look at *Activity 5*, develop the policy and get it endorsed by the management. If you decide to develop a carbon policy, you may also want to prepare a short 'climate statement' that you can use when communicating with clients and investors.
DECISION #2: Carbon accounting and reporting? Decide whether your company wants to track its carbon footprint and, possibly, set a climate target.	○ Carbon footprint selected as impact area that you want to explore in more detail under *'wrap-up step 1'.* ○ Carbon footprint of more than 2 to 3 tCO2eq per employee and year. ○ Climate impact is given high priority (i.e. to strengthen your credibility by "walking the talk").	In case of a positive decision, have a look at *Activity 6* and go through the section 'track carbon footprint' under step 3. If you decide to do carbon accounting and reporting, you probably also want to endorse a climate policy (see decision #1).
DECISION #3: Climate as part of the impact management and monitoring system? Decide whether your company wants to systematically track climate indicators and communicate as generated impact.	○ Carbon handprint with a potential to reach more than 10,000 tCO2eq. ○ Climate impact is at the very core of business activities: you are deliberately working towards smaller carbon footprints of products and services, offering solutions that help others lower their carbon footprint, or providing products and services that support adaptation to climate change. ○ Carbon adaptation selected as impact area that you want to explore in more detail under *'wrap-up step 1'.*	In case of a positive decision, move on to the relevant sections under *step 3.* You probably also want to endorse a climate policy (see decision #1) and start accounting and reporting your carbon footprint (see decision #2).

For some impact enterprises, the climate finance readiness assessment may end here - with the informed decision that there is no need to further explore climate finance at this time (i.e., if you selected "none of the above - climate impact is of minor importance for my company" under *'wrap-up of step 1')*. However, even if climate is of minor importance, you can consider endorsing a climate policy and tracking your company's carbon footprint to follow best business practices.

It is recommended to keep all carbon-related documents in one place readily available to the management: this includes, for instance, the climate policy, carbon footprint estimates, and any other relevant documents. Clients, investors, donors and national regulators may request information about your climate impact and climate strategy - having your policy and carbon estimates readily available will help to respond transparently and consistently to incoming requests.

Record the decisions taken by the company's management!

Select one or several of the action points resulting from the decisions taken:

- ◯ **Prepare and endorse a climate policy**
- ◯ **Start tracking and reporting carbon footprint**
- ◯ **Include "climate impact" into the impact management and monitoring system**
- ◯ **None of the above - climate impact is of minor importance for my company**

STEP 3

INSTITUTIONALISE CLIMATE IMPACT MONITORING

OBJECTIVES

Establish a solid dataset to demonstrate the company's climate impact - to increase your readiness for climate finance.

REQUIRED RESOURCES

Integrating new or refined indicators into the company's impact management and monitoring system will require human resources and possibly incur some direct costs. You may want to consider adding "climate impact monitoring" to the terms of references of one of your staff members. Direct costs may incur for conducting surveys, installing sensors, or adapting products.

OUTPUT

Climate impact indicators selected for routine monitoring *(see 'wrap-up step 3')*.

Recommended focus: generate evidence that priority activities have a climate impact. Without data, it will be difficult to access climate finance.

To access climate finance, you need to have data available that demonstrates your impact. In this step, you find tips and tricks, as well as references to additional resources, about how to refine your climate impact monitoring system. Optimizing your climate impact monitoring is an iterative process and there will be, very likely, a back and forth between refining measurement and exploring climate finance options.

Previously you made an ad-hoc collection of relevant information to come up with a view on your climate impact. Now, it is about integrating the monitoring of relevant indicators into your regular business processes. Keep in mind: "perfect is the enemy of good". Start tracking areas where you have the biggest climate impact, possibly still based on some bold assumptions, and then optimise and refine your monitoring system over time. Also, consider applying for capacity building or an Impact-Ready Matching Fund (IRMF) offered by the *Biniyog-Briddhi programme*. The programme offers training and non-repayable funding instruments that support and reward early-stage impact enterprises for building their capacities in impact measurement and management.

- Track carbon footprint. Start building a central registry to document your emissions and build the capacity of your team to reliably record and report relevant information on a pre-agreed frequency. Produce short annual reports to transparently disclose the company's carbon footprint. Some tricks and tips are provided in *Activity 7*.

- Track carbon handprint. Unlike tracking the carbon footprint that covers everything within your operational boundaries, for the carbon handprint you can be very selective in choosing the products or services for which you want to quantify emission reductions. Some tricks and tips are provided in *Activity 8* and *Activity 9*.

- Track climate adaptation activities. To illustrate your impact on climate adaptation, consider developing a "Theory of Change". Theory of Change is widely used for climate adaptation interventions and provides a structured method to link your inputs and activities to outputs, outcomes and eventually climate impact, see *resource library [17]*. From the Theory of Change you can derive indicators for your company's impact and monitoring system. For routine monitoring it is best to focus on output indicators alongside regular monitoring of outcome indicators. Learn more about the Theory of Change in the *Social Finance Academy*.

Recommended focus: prioritise areas where you expect to have the biggest climate impact. There is likely no need to pursue all three options listed above.

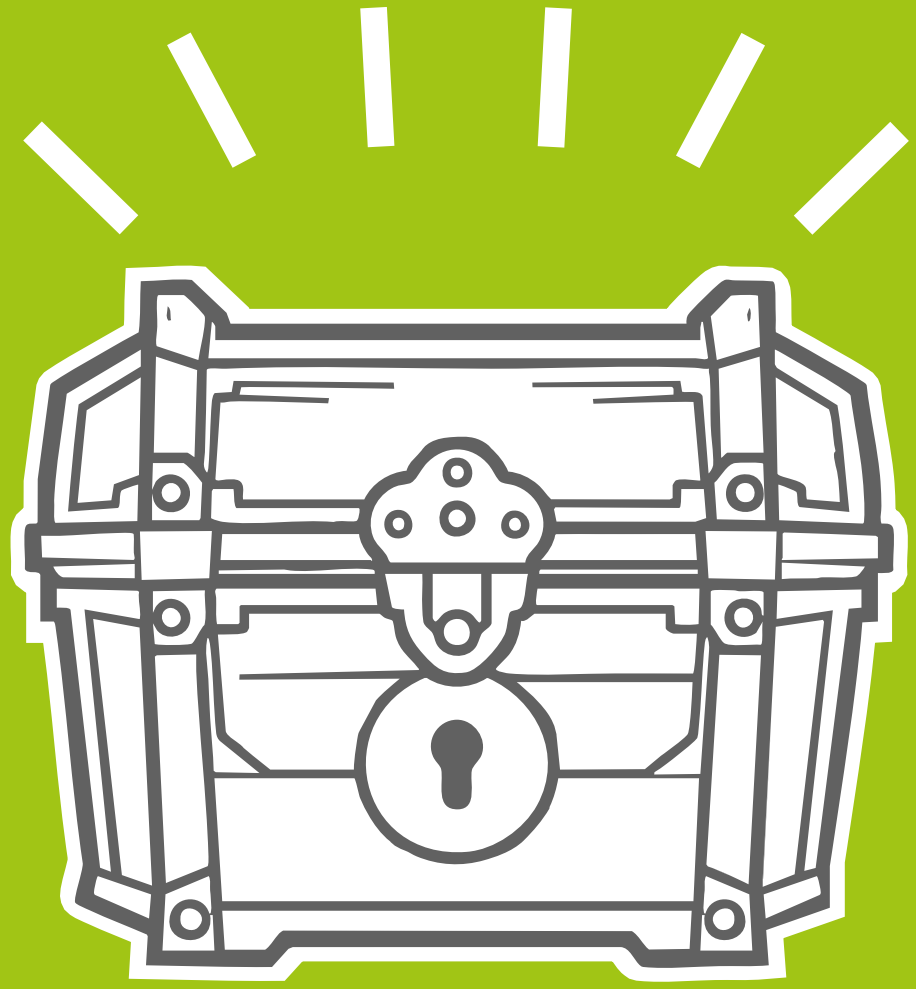
WRAP UP

Summarise climate impact indicators that you will institutionalise!

Select one or several of the components that you plan to integrate into your routine monitoring systems:

- ◯ **Systematic tracking of scope 1 and scope 2 emissions**
- ◯ **Systematic tracking of scope 3 emissions**
- ◯ **Systematic tracking of activity data for selected products, services or interventions (registry/database)**
- ◯ **Systematic (re-)assessments of emission factors related to the activity data (related to bullet point above)**
- ◯ **Systematic tracking of (output) indicators to document contributions to climate adaptation**
- ◯ **None of the above - climate impact is of minor importance for my company**

STAGE 2



MONETISE CLIMATE IMPACT

STEP 4

EXPLORE PATHWAY TO MONETISE CLIMATE IMPACT

OBJECTIVES

Identify the most promising pathway to monetise your climate impact (in line with the options presented in the *'Carbon Finance Market Scoping Report for Bangladesh'*) and get started on the journey.

REQUIRED RESOURCES

Identifying a climate finance pathway can be done within just a few hours assuming that the required background information has been put together in stage 1 of this navigator. However, from starting the journey until receiving climate finance likely takes a few years, involves certain risks, needs committed working time, and may require substantial financial investments (in particular for the carbon market pathway for which certification costs alone are typically around EUR 100,000).

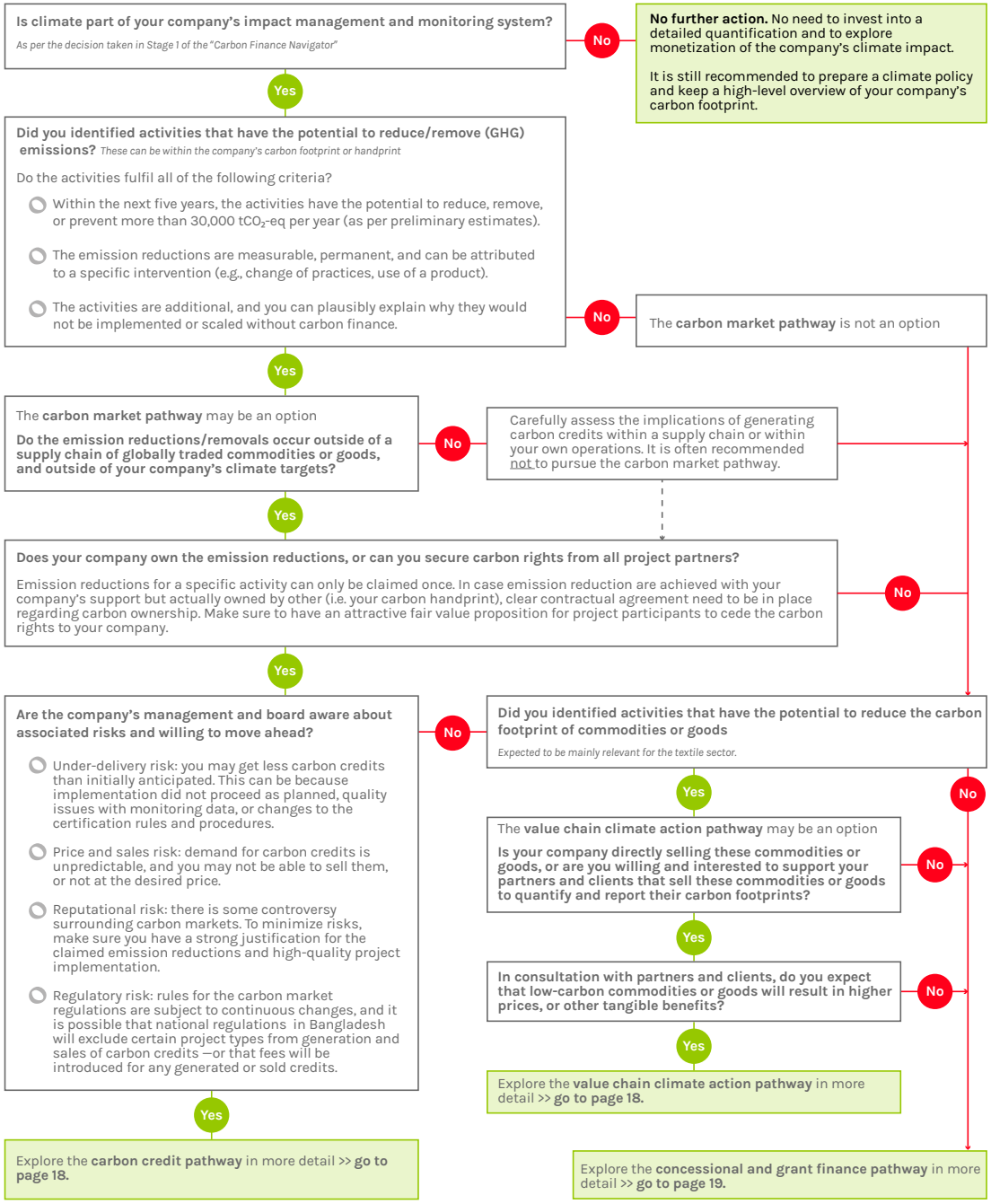
OUTPUT

Decision taken by the company about what climate finance pathway(s) to explore in more detail.

The decision tree below helps you to select the most promising pathway to monetise your climate impact.

Familiarise yourself with the following terms (also refer to the "climate vocabulary" in the annex):

- **Additionality.** A criterion for assessing whether a project has resulted in GHG emission reductions or removals in addition to what would have occurred in its absence. This is an important criterion when the goal of the project is to offset emissions elsewhere. *Resource library [3].*
- **Carbon ownership.** To avoid double counting, "ownership" of the carbon emission reductions needs to be clearly defined and understood by everyone involved. *Resource library [18].*
- **Double counting.** Two or more reporting companies (or entities) take ownership of the same emissions or reductions. *Resource library [3].*
- **Permanence.** Carbon credits must be associated with the permanent avoidance or permanent enhanced removal of GHG emissions. If a project that only temporarily stores carbon (e.g., by sequestering it in trees or soils) substitutes for activities that permanently avoid carbon emissions (e.g. by reducing fossil fuel use), environmental integrity will be undermined. *Resource library [18].*



GUIDANCE FOR THE CARBON MARKET

The decision tree above showed that carbon credits could be a valid option for specific activities implemented by your company because all the six criteria below are (likely) fulfilled:

- Within the next five years, the activities have the potential to reduce, remove or prevent more than 30,000 tCO2eq per year (as per best preliminary estimates).
- The emission reductions are measurable, permanent, and can be attributed to a specific intervention (e.g., change of practices, use of a product). For instance, the three examples provided for Activity 3 fulfil these criteria.
- The activities are additional, and you can plausibly explain why they would not be implemented or scaled without carbon finance. For instance, by demonstrating that the proposed activities are not legally required, the project is not financially feasible in the absence of climate finance, or the proposed activities are exploring new ways of doing business disrupting common practice.
- The emission reductions/removals occur outside of a supply chain of globally traded commodities or goods, and outside of your company's climate targets. If not, you made an informed decision to move ahead with carbon credits anyway.
- Your company owns the emission reductions/removals, or you can secure carbon right waivers from all project participants.
- The company's management and board are aware about associated risks and willing to move ahead.

Still, there are a few hurdles to take: from initiating the process to getting the first revenue will typically take at least three years, and the external costs of carbon certification (i.e., fees for the carbon consultant, third-party verification, and carbon standard) for a five-year certification cycle are typically around EUR 100,000 plus a margin for carbon credit trading.

The navigator provides guidance to take you through the following six phases, see Activity 10 and *resource library [18]*:

1) Identify a carbon project developer
2) Project documentation and stakeholder consultation
3) Validation and registration
4) Monitoring and reporting
5) Verification and issuance
6) Selling carbon credits

GUIDANCE FOR VALUE CHAIN CLIMATE ACTION

The decision tree showed that carbon credits are not a valid option to valorise climate impact derived from activities implemented by your company. However, there may be an option through value chain climate action, because the three criteria below are (likely) fulfilled:

- You implement activities that have the potential to reduce the carbon footprint of commodities or goods.
- Your company is directly selling these commodities or goods, or you are willing and interested to support your partners and clients that sell these commodities or goods to quantify and report the carbon footprints.
- Consultation with partners and clients confirmed that low-carbon commodities or goods will likely result in higher prices, or you anticipate getting stronger connections to some of your clients that are looking to purchase products with a low emission factor.

Climate interventions in the value chain can broadly be grouped into two types:

1) **Emission reductions with supply chain traceability.** That means the emission reductions are achieved in your own or supplier's site(s) that can be directly linked to the exact material your company will receive or sell. In that case you can directly account for the emission reductions and sell products or services with a below-average carbon footprint at (possibly) a higher price. Refer to resource library [4] and [11] for more information.

2) **Emission reductions without supply chain traceability.** That means the emission reductions are achieved within the supply-shed (i.e. a range of suppliers within a certain geographical area) but the emission reductions cannot necessarily be directly linked to the materials that your company will receive or sell (i.e. you don't know if the materials that you are sourcing were indeed produced in the sites where the interventions took place). For instance, you support textile recycling interventions in a range of factories, however, a purchaser does not know if the actually purchased textiles come from these factories. For such interventions, it is possible to quantify the emission reductions and use pre-defined methodologies to allocate a fair share of the reductions to a buyer. The buyer may pay a premium to integrate the emission reductions as deductions in its own corporate carbon accounting. Refer to *resource library [19] and [20]* for more information.

In Bangladesh, mostly interventions in the textile industry may fall under this climate finance pathway. Refer to specific guidance specifically for the ready made garment value chain, see *resource library [21] and [22].*

GUIDANCE FOR CONCESSIONAL AND GRANT FINANCE

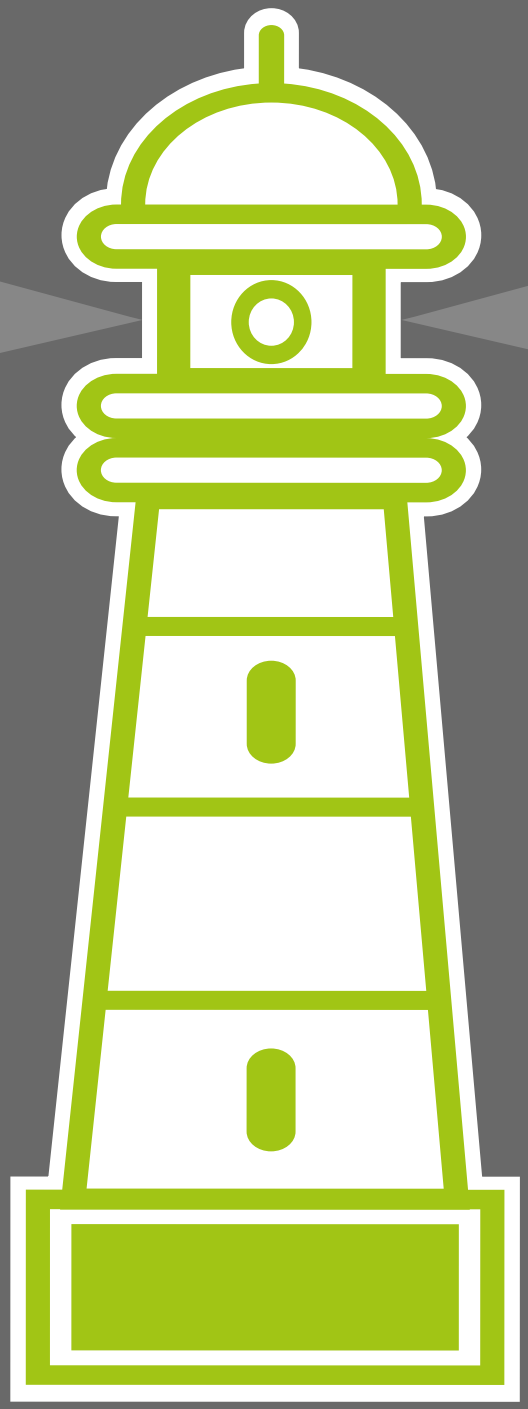
The decision tree showed that neither carbon credits nor value chain climate action are valid options to valorise climate impact derived from activities implemented by your company.

This can be for various reasons:

- Activities focus on adaptation rather than mitigation
- Insufficient emission reductions
- Emission reductions are not additional
- Emission reductions are claimed by someone else
- Buyers have no interest in low-carbon commodities
- Certification pathways are too expensive, too risky or too complicated

Still, knowing your carbon impact and having data available that documents this impact, is expected to be valuable to access grants, concessional loans and technical assistance.

Refer to the options outlined in the *'Carbon Finance Market Scoping Report for Bangladesh'* under 'concessional and grant finance'.



STAGE 3

RE-ASSESS AND REFLECT ON CLIMATE STRATEGY

STEP 5

RE-ASSESS AND REFLECT ON CLIMATE STRATEGY

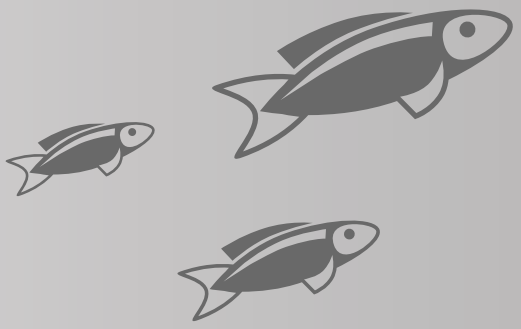
OBJECTIVES

Have another look at your climate impact every five years, or in case you become aware of any changes in the sector that impacts the enabling environment to access climate finance. The climate finance landscape is changing constantly. What is possible today, may no longer be possible in five years. What is a too small climate impact today, may be relevant in a few years.

REQUIRED RESOURCES

A couple of hours every year by the management to review progress towards accessing climate finance and decide if a re-assessment and reflection on climate strategy is required.

ACTIVITIES SECTION



ACTIVITY 1 - ESTIMATE SCOPE 1 AND SCOPE 2 EMISSIONS

Scope 1 includes all direct emissions from company-owned vehicles, fuel use in company-controlled facilities and leakage of chemicals with greenhouse gas potential. For many impact enterprises in Bangladesh, it will be sufficient to track fuel purchases for company cars and backup generators. To convert litres of fuel into tCO2eq, multiply the combined consumption of gasoline, petrol and diesel (in Liters as per purchase records) by 0.0025 tCO2eq/L (which is an average emission factor for fossil fuels).

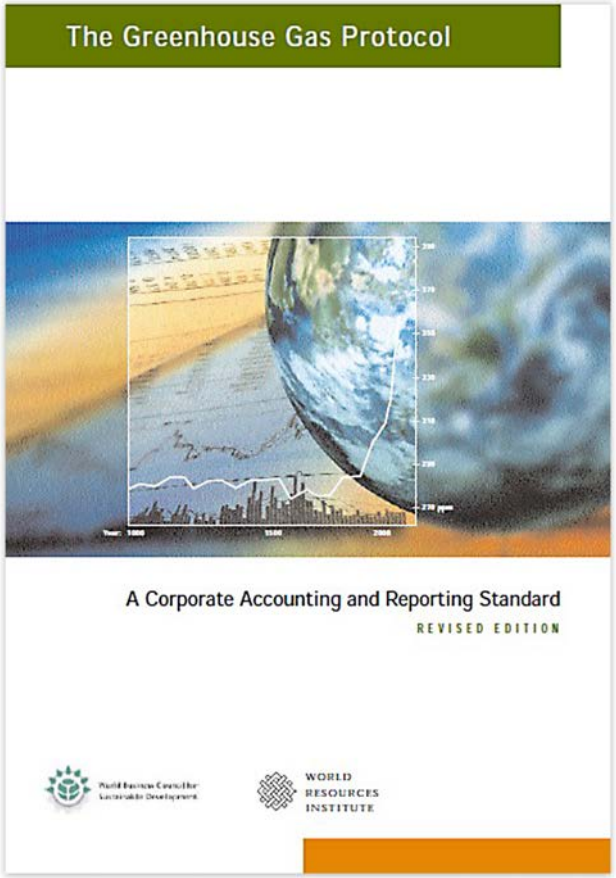
Example: you estimate that a total of 2,000 L fuel was used for your company cars and backup generators in the past year:
2,000 L * 0.0025 tCO2eq/L = 5 tCO2eq

Scope 2 includes all indirect emissions from electricity, steam, heating or cooling of company-controlled facilities. For most SMEs in Bangladesh, it will be sufficient to track electricity consumption. To convert electricity consumption into tCO2eq, multiply the consumed kWh (as per the electricity bill) by 0.0006 tCO2eq/kWh (which is the emission factor for electricity in Bangladesh).

Example: you estimate that a total of 10,000 kWh electricity was used in your facilities in the past year:
10,000 kWh * 0.0006 tCO2eq/kWh = 6 tCO2eq

Please note that the calculations above provide a first rough estimate. Aim at identifying emissions that together make up at least 90 of the company's carbon footprint. In step 3, you may decide to go into more details and also include e.g. emissions from refrigerants that could be relevant for companies that have a cold chain. No need to be perfect: knowing your carbon footprint is a journey, and this is the start.

Refer to the GHG Protocol for additional guidance about GHG accounting:



ACTIVITY 2 - ESTIMATE SCOPE 3 EMISSIONS

Scope 3 includes all emissions from upstream and downstream activities not directly owned or controlled by your company, and therefore not already reported under scope 1 or scope 2. Unlike larger companies, the Science Based Targets initiative (SBTi, see step 2) does not require Small and Medium-sized Enterprises (SMEs), with less than 500 employees, to set targets for their scope 3 emissions. However, according to the SBTi, SMEs are still expected to commit to measure and reduce their scope 3 emissions.

Go through the list of scope 3 categories below to identify potential carbon hotspots for which:

1. emissions are likely to be higher than for your scope 1 and scope 2 emissions,
2. are deemed critical by key stakeholders, or
3. there are potential emissions reductions that could be undertaken or influenced by your company.

Recommended focus: identify the hotspots within the scope 3 categories. Likely only a few, if any, of these 15 categories are relevant for your company. If relevant, refer to the GHG Protocol Guidance document linked in the table below for each of the scope 3 categories.

To triangulate your initial estimates and carbon hotspots, you can use a carbon footprint calculator:

- The BEE: *https://www.changeclimate.org/bee*
  - Strength: linked to expenditures only - quick triangulation possibly without mass-based calculations
  - Weakness: not specific for Bangladesh
- Persefoni calculator: *https://app.persefoni.com*
  - Strength: allows quite detailed calculation of carbon footprint
  - Weakness: rather complicated and requires a company email address for registration

Categories of upstream activities		
Category 1: Purchased goods and services *GHG Protocol Guidance*	Carbon footprint of goods and services purchased by your company (including extraction, production and transportation if not reported in another upstream activity).	**Likely relevant.** If you purchase goods in the range of several tonnes per year, for example, if you are a manufacturer or retailer. **Not relevant.** If you purchase goods in the range of just a few kilograms per employee per month, for example, if you do not purchase anything other than stationery materials and electronic equipment used in your offices.
Category 2: Capital goods *GHG Protocol Guidance*	Cradle-to-gate emissions from the construction, production and transportation of capital goods (e.g., plants, property, and equipment) that you use to manufacture a product or provide a service.	**Likely relevant.** If your company owns or controls many capital assets, for example a fleet of vehicles, or several manufacturing facilities. **Not relevant.** If you just own one office and a few company vehicles.

Categories of upstream activities		
Category 3: Fuel and energy related activities *GHG Protocol Guidance*	Accounting for emissions from the extraction, production, and transportation of fuels and energy purchased (if not already accounted for in scope 1 or scope 2).	○ **Likely relevant.** If your company sells fuels or electricity to customers. ○ **Not relevant.** If your company is not working in the energy sector.
Category 4: Transportation and distribution *GHG Protocol Guidance*	Emissions from transport of goods by vehicles not owned by your company: inbound logistics, between company's own facilities and outbound logistics (e.g., distribution of sold products to customers).	○ **Likely relevant.** If transport of goods takes place at least on a weekly basis, and/or if air freight is involved on at least a monthly basis. ○ **Not relevant.** If the estimated fuel consumption is clearly below what is reported under scope 1.
Category 5: Waste generated in operations *GHG Protocol Guidance*	Emission from disposal and treatment of waste in facilities not owned or controlled by your company	○ **Likely relevant.** If you generate waste in the range of several tonnes per year, for example, if you are a manufacturer or retailer. ○ **Not relevant.** If you generate waste only in the range of a few kilograms per employee per month, for example, waste from offices.
Category 6: Business travel *GHG Protocol Guidance*	Transportation of employees for business-related activities in vehicles not owned or operated by your company.	○ **Likely relevant.** If you take multiple business trips by air each year, or if the fuel consumption for road travel is expected to be equal to or greater than the amount calculated for scope 1. ○ **Not relevant.** If you only have infrequent travel, for short distances, and only by road.
Category 7: Employee commuting *GHG Protocol Guidance*	Transportation of employees between their homes and worksites.	○ **Likely relevant.** If many employees commute using their own car for several kilometres every day. ○ **Not relevant.** If most employees commute by bicycle or foot or use public or shared transport.
Category 8: Leased assets *GHG Protocol Guidance*	Emissions from the operation of assets leased by your company that have not yet been included in scope 1 and scope 2	○ **Likely relevant.** If energy use in leased facilities (used by your company) has not fully been accounted for in scope 1 and scope 2. ○ **Not relevant.** If you have no leased assets, or these have already been considered under scope 1 and scope 2.

Categories of downstream activities		
Category 9: Downstream transportation and distribution *GHG Protocol Guidance*	Emissions from transport of products sold by your company to end users, including retail and storage (if not paid for and controlled by your company).	○ **Likely relevant.** If you sell products that are heavy or bulky, and expected to be transported over long distances to reach the end users' location. ○ **Not relevant.** If you don't sell products or sell these only to the local market.
Category 10: Processing of sold goods *GHG Protocol Guidance*	Emissions of intermediate products further processed by downstream companies.	○ **Likely relevant.** If you sell goods that need further processing in the range of several tonnes per year, for instance, in the textile industry. ○ Not relevant. If you don't sell goods that need further processing.
Category 11: Use of sold goods *GHG Protocol Guidance*	Emissions of goods and services sold by your company over their expected lifetime.	○ **Likely relevant.** If you sell products that consume fuel or electricity. ○ **Not relevant.** If you don't sell products, or these do not consume power.
Category 12: End-of-life treatment of sold goods *GHG Protocol Guidance*	Emissions from waste disposal and treatment of products sold by your company at the end of their life.	○ **Likely relevant.** If you sell products in the range of several tonnes per year, especially if they are heavy and have a short lifetime. ○ **Not relevant.** You don't sell products, or the products have a long lifetime.
Category 13: Leased assets *GHG Protocol Guidance*	Emissions from operation of assets owned by your company and leased to other entities, not included in scope 1 and scope 2.	○ **Likely relevant.** If energy use in leased facilities (owned by your company) has not fully been accounted for in scope 1 and scope 2. ○ **Not relevant.** If you do not have leased assets or already considered those under scope 1 and scope 2.
Category 14: Franchises *GHG Protocol Guidance*	Emissions from operation of franchises, not included in scope 1 and scope 2.	○ **Likely relevant**. If energy use by franchises that has not fully been accounted for in scope 1 and scope 2. ○ **Not relevant.** If you do not have franchises or already considered those under scope 1 and scope 2.
Category 15: Investments *GHG Protocol Guidance*	Emissions from operation of investments (including equity and debt investments and project finance), not included in scope 1 or scope 2.	○ **Likely relevant.** If your company makes significant investments into other companies or projects. ○ **Not relevant.** If there are no or only very small investments.

ACTIVITY 3 - MAKE A FIRST ROUGH ESTIMATE OF YOUR CARBON HANDPRINT

Use the three steps below, guided by three examples, to determine the carbon handprint of a specific product or service. If you have more than one product or service, go through the exercise for each of them separately.

	Example 1	Example 2	Example 3
	Impact enterprise manufacturing and selling fuel-efficient cookstoves	Impact enterprise helping smallholder farmers to improve their agricultural practices by providing access to an app	Impact enterprise offering financial solutions to incentivise the use of electric three-wheel taxis and the establishment of solar-powered re-charging stations
Step 1 Describe your baseline and project scenario of a specific product or service offered to a specific customer group, and how it leads to an emission reduction.	**Project scenario:** Households with fuel-efficient stoves use only a small amount of firewood for cooking. **Baseline scenario:** Households without the stoves, but with otherwise similar characteristics, use a higher amount of firewood. **Emission reduction:** Reduced emissions because of reduced firewood consumption.	**Project scenario:** Thanks to the improved practices, less fertilizer is applied by farmers that are using the app. **Baseline scenario:** Smallholder farmers, with otherwise similar characteristics, are using a bigger amount of fertilizer. **Emission reduction:** Reduced emissions because less fertilizer is produced.	**Project scenario:** No fuel is used by the solar-powered electric three-wheel taxis that used the financial solutions. **Baseline scenario:** Three-wheel taxis, with otherwise similar characteristics, are using diesel or gasoline. **Emission reduction:** Reduced emissions because of reduced fuel consumption.
Step 2 Make a rough, but quantitative, estimate of the expected total change to be achieved through your products and services over the next few years ("activity data"). Typically, you have to estimate the "number of units", and the "change per unit".	**Number of units:** The marketing team plans to sell 1,000 stoves next year. **Change per unit:** The technical team found that an average household consumes 6 kg of firewood per day, but with a fuel-efficient stove consumption is only 2 kg. **Activity data:** For 1,000 stoves, instead of 2,190 tonnes only 730 tonnes of firewood are expected to be used per year, i.e. a reduction of 1,460 tonnes of firewood.	**Number of units:** The marketing team plans to work with 5,000 farmers. **Change per unit:** The technical team found that usage of triple superphosphate (TSP) fertilizer reduced, on average, from 150 kg to 100 kg per year for supported farmers. **Activity data:** For 5,000 farmers, instead of 750,000 kg only 500,000 kg of TSP is expected to be used per year, i.e. a reduction in TSP usage of 250,000 kg.	**Number of units:** The marketing team expects that 500 three-wheel taxi drivers will switch from a gasoline to an electric vehicle next year, all exclusively using solar-powered charging stations. **Change per unit:** The technical team found that, in the baseline, taxi drivers purchase on average 15 L of gasoline every day. **Activity data:** For 500 vehicles, annual fuel consumption is expected to reduce from 2,737,500 L to 0.

	Example 1	Example 2	Example 3
	Impact enterprise manufacturing and selling fuel-efficient cookstoves	Impact enterprise helping smallholder farmers to improve their agricultural practices by providing access to an app	Impact enterprise offering financial solutions to incentivise the use of electric three-wheel taxis and the establishment of solar-powered re-charging stations
Step 3 Calculate the emissions associated with the expected change using an emission factor, i.e. the rate at which an activity emits carbon. For now, you can find emissions factors through internet research, expert interviews, or Chat GPT	**Emission factor:** Burning 1 kg of dry firewood emits around 1.8 kgCO2eq. **Emissions reductions:** Avoiding the burning of 1,460 tonnes of firewood will lead to an emission reduction of roughly 2,628 tCO2eq.	**Emission factor:** The production of 1 kg of TSP emits approx. 1.0 kgCO2eq. **Emissions reductions:** Avoiding the use of 250,000 kg of TSP will lead to an emission reduction of up to 250 tCO2eq.	**Emission factor:** Burning 1 L of gasoline produces approx. 2.3 kgCO2eq. **Emissions reductions:** Avoiding the burning of 2,737,500 L of gasoline will lead to an emission reduction of approximately 6,296 tCO2eq.

ACTIVITY 4 - ASSESS CONTRIBUTIONS TO NATIONAL CLIMATE ADAPTATION PRIORITIES

Prepare a list of activities that you expect to be relevant and explain how they contribute to climate change adaptation. Try to link each of them to one or several of the six goals described in Bangladesh's NAP 2023 – 2025, see *resource library [7]:*

- **Goal 1:** Ensure protection against climate change variability and induced natural disasters
- **Goal 2:** Develop climate-resilient agriculture for food, nutrition and livelihood security
- **Goal 3:** Develop climate-smart cities for improved urban environmental and well-being
- **Goal 4:** Promote nature-based solutions for conservation of forestry, biodiversity and well-being of communities
- **Goal 5:** Impart good governance through integration of adaptation into the planning process
- **Goal 6:** Ensure transformative capacity-building and innovation for climate change adaptation

ACTIVITY 5 - DEVELOP A CLIMATE POLICY

It is not mandatory and also not (yet) common practice for SMEs to have a climate policy in place. However, developing a climate policy requires minimal resources and can help in shaping a coherent and transparent strategy for your company to navigate in a world affected by climate change. Therefore, we recommend that you put a carbon policy in place. The policy should include:

- Background and objectives of the policy. For example, a recognition that climate change poses a threat to Bangladesh and the world, and that your company therefore wants to ensure to operate and grow in an environmentally sustainable manner. If relevant, you may also want to refer to specific country or sector initiatives.

- Description of climate impacts and climate targets. Specify where your company has an impact on the climate: e.g. reduce carbon footprint, increase carbon handprint, or strengthen adaptation. Specify whether you plan to account and report your carbon footprint, and at what frequency. If relevant, specify your carbon reduction target.

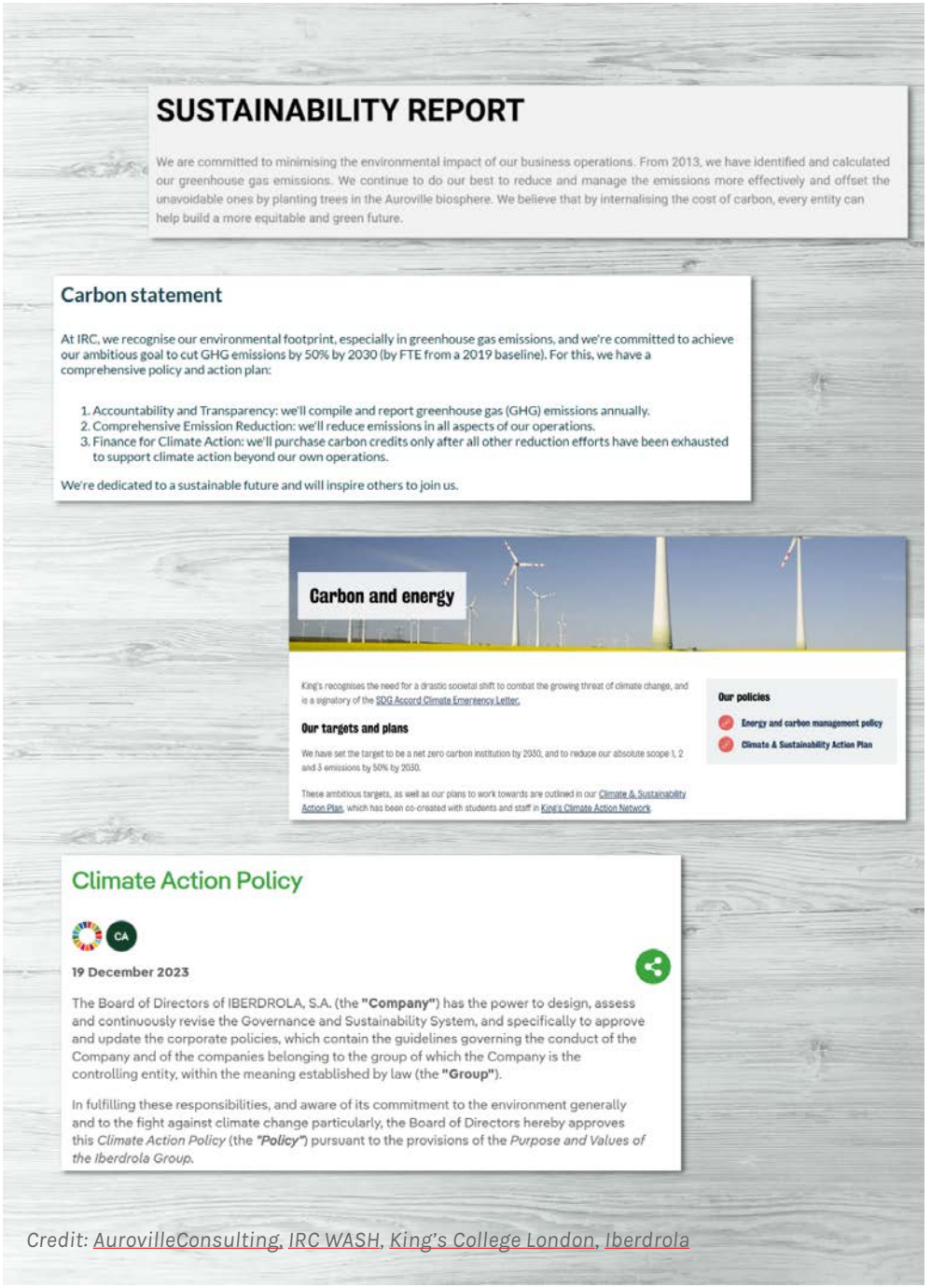
- Description of climate action. Specify activities that you plan to implement to further improve your climate impact. If relevant, you may also specify activities to make your own operations more climate resilient.

Tips and tricks:

- Many multinational corporations have elaborated and well-presented climate policies in place (example *Coca Cola* and *Nestlé*).

- For SMEs, the carbon policy can just be an internal memo of one or two pages and communicated through a short external-facing 'carbon statement' on the website or in the annual reports. See some examples on the right hand side.

- Some may decide to integrate climate into a broader sustainability or environmental policy (example *Water for People*).



Credit: AurovilleConsulting, IRC WASH, King's College London, Iberdrola

ACTIVITY 6 - COMMIT TO TRACK AND REDUCE YOUR CARBON FOOTPRINT

While companies in high-emitting sectors in certain countries are obligated to track and report their GHG emissions, accounting and reporting of emissions remain voluntary for SMEs in Bangladesh. However, preparing an overview of your carbon footprint and tracking the trendline over time can be useful for communication purposes and to mitigate potential carbon-related risks – in particular if your company has emissions in the range of several thousand tCO2eq per year.

Always keep in mind, measuring your carbon footprint is not the end goal, but rather a means to inform how to most efficiently reduce your GHG emissions. Below a (non-exhaustive) list with possible interventions to reduce your carbon footprint:

- Reduce fuel consumption (e.g. electrification of vehicle fleet, mini-solar system to replace diesel generator)
- Decarbonise power consumption (e.g. purchase power that is known to have a low emission factor, support national efforts to decarbonise electricity from the grid)
- Reduce leakage of chemicals with greenhouse gas potential (e.g. capture or flaring of methane emissions).
- Reduce carbon footprint of products (e.g. prolong lifetime, improve energy efficiency in production process)
- Reduce business travel (e.g. invest in teleconferencing, add carbon emissions into travel approval process)

If you decide to account and report your carbon footprint, it is recommended to prepare a statement about your carbon hotspots and outline some actions that you will undertake to reduce those *(see Activity 5).*

In addition, you can consider specifying a climate target - mainly relevant for bigger and more established impact enterprises. Have a look at the *Science-Based Target initiative (SBTi)* that provides valuable guidance about target setting and reporting, see resource library [8]. For SMEs the recommended target is a 50% reduction between 2018 and 2030 (4.2% annual linear reduction). For SMEs, the SBTi does not require scope 3 targets. However, they must commit to measure and reduce their scope 3 emissions, see *resource library [9].*

ACTIVITY 7 - IMPLEMENT A MONITORING SYSTEM FOR YOUR CARBON FOOTPRINT

Work with your team to regularly measure key indicators that you need to track your carbon footprint.

- Scope 1 and 2 emissions. Expanding on *Activity 1*, introduce a process to track fuel consumption (scope 1) and electricity consumption (scope 2) for company-owned or controlled vehicles and facilities. This may be a simple log sheet to record the total amount of purchased gasoline and diesel, and electricity meter readings on a monthly basis. Some considerations:
  - Instead of tracking fuel consumption directly, you can consider tracking total expenditures for fuel or tracking kilometre readings from vehicle log sheets and then convert it into an estimated amount of fuel usage.
  - If you purchase steam, heating or cooling for any of your facilities, or if there is any leakage of chemicals with GHG potential from company-controlled facilities, these should also be included into your tracking system.
  - Use emission factors from the GHG protocol or other reliable data sources, some of which are summarised in the resource library [10]. Transparently disclose the emission factors in your annual carbon reports and consistently use the same emission factors across years and facilities (and disclose if any adjustments are made to the emission factors).
- Scope 3 emissions. Guided by the hotspot analysis performed in *Activity 2*, specify the activity data that you need to track and identify/disclose corresponding emission factors. More guidance for each of the 15 categories of scope 3 emissions are provided by the GHG Protocol, see *resource library [11]*. Some considerations:
  - Measuring scope 3 emissions can be time and resource intensive. Focus on the categories identified as hotspots.
  - Start with tracking relevant "activity data" and use average emission factors. However, over time you may want to consider collaborating with your suppliers to calculate and report specific (and below-average) emission factors.
  - If you are selling internationally traded commodities (e.g. relevant for the textile industry), consider also quantifying product specific carbon footprints and comparing them with sector-average figures.

ACTIVITY 8 - IMPLEMENT A MONITORING SYSTEM FOR YOUR CARBON HANDPRINT

To quantify the climate impact of a specific product, service or intervention you typically need to have two datasets in place:

1) Specific activity data: i.e. a registry of "units" that are responsible for the emission reduction. A "unit" can be, for example, a fuel-efficient stove, a farmer using a mobile app, a three-wheel vehicle, a water kiosk, or a plot of land. At the very minimum you need to quantify the number of "units" sold, constructed or served within a certain period of time. However, for certain climate finance options you need to do more than that and register each "unit" separately with a unique identifier (which allows drawing a random sample from the database for monitoring and verification). Unique identifiers are, for example, a unique code engraved on a product, name and phone number of a user, GPS coordinates of a facility, or a shape file of a plot. To build such a database, you may use a "registration form" that captures all relevant information about unique identification: date of sale, commissioning or service provision; and possibly a set of baseline characteristics for each "unit". Make sure that adequate quality control checks are applied before the information from the registration form is added to the database.

   Managing and updating such a database can be time-intensive and prone to errors. Changes to the database can possibly be made through the completion of an "amendment form", e.g. if there is a new owner of a stove or vehicle, or if the phone number or address of a project participant has changed. However, it is unlikely that you can manage to get all changes registered. This is not necessary, because it is possible to account for some changes during monitoring and verification by introducing a "could not be identified" category, e.g. if you take a random sample of 100 units out of 5,000 units in the database, but are only able to identify and check 80 of them, you can adjust your carbon calculation to the number of eligible/active units (e.g. 80/100 * 5,000 = 4,000).

   - Example 1 for fuel-efficient cookstoves. The stoves may have a unique ID attached or engraved. The database should include all stoves registered with their unique ID, and information of exact stove type and location of use.

   - Example 2 for an app to improve agricultural practices. The database should include all farmers that subscribed for using the app. Name, phone number and location may be used for unique identification of the farmers.

   - Example 3 for electric three-wheel taxis. The database should include all vehicles, as well as name, phone number, address of the driver. A vehicle identification number may be used for unique identification of a specific three-wheel taxi.

2) Specific emission factors: i.e. a measurement of the emission reductions or removals per "unit". For this, e.g. methodologies approved by carbon standards (see Activity 9) or life-cycle assessment methods can be used. At the very minimum, an average life-time emission reduction per unit sold, commissioned or served should be established. This emission factor can then be used to estimate the carbon handprint. However, for certain climate finance options you not only have to show that a certain number of units have been sold, commissioned or served, but you also have to demonstrate to what extent emissions have effectively been reduced. For instance, for carbon credit projects, typically a random sample of units must be selected from the database and surveyed (with the carbon methodologies providing guidance about the sample size and monitoring frequency). In short: you don't get carbon credits for the sales of products but for the use of them.

   - Example 1 for fuel-efficient cookstoves. Data about the functionality and usage of the stoves is collected in a survey from the owners of the selected cookstoves.

   - Example 2 for an app to improve agricultural practices. Selected farmers are asked in a survey about the use of fertilizer.

   - Example 3 for electric three-wheel taxis. The owners of selected vehicles are asked in a survey about average daily driving distance and frequency of using solar-powered recharging stations.

ACTIVITY 9 - IDENTIFY RELEVANT CARBON METHODOLOGIES

Carbon methodologies outline how emission reductions or removals are calculated for specific types of projects. They include a definition of the scope and applicability, the calculation of baseline emissions, and monitoring requirements. Carbon standards make the carbon methodologies publicly available, see *resource library [12]*:

- Gold Standard (GS)
- Voluntary Carbon Standard (VCS) / Verra
- Clean Development Mechanism (CDM)

Browse through the above links and check for methodologies that may be applicable for your project type. At this stage, only spend a couple of hours browsing through the resources and then move on to stage 2 of the climate finance navigator. The objective for now is to familiarise yourself with the structure and the broader applicability of these methodologies, however, for the selection of a specific methodology you will likely have to work with a specialised carbon project developer (see stage 2).

For many project types and methodologies additional resources exist. Often various organizations come together to develop carbon methodologies in a non-competitive space, sometimes supported by a donor agency. For impact enterprises in Bangladesh the following communities of practice may be of special interest:

- Cooking energy transition >> *Link* and *resource library [13]*
- Safe drinking water >> *Link*, *resource library [14]*
- Electric vehicles >> *resource library [15]*
- Agricultural practices >> *resource library [16]*
- Renewable energy >> *Link*

ACTIVITY 10 - EXPLORE THE CARBON MARKET

Phase 1 - Identify a carbon project developer

Indicative time requirement: 2 - 3 months
Indicative costs: staff time

Due to the complexity of the carbon market, we recommend that you partner up with a professional carbon project developer specialised in developing and registering carbon projects. Building up in-house capacity to manage carbon project certification could still be considered at a later stage if carbon credits prove to be a viable core component of your business. Typical split of responsibilities:

- Your responsibility as the project owner is to ensure a high-quality project is implemented in line with the agreed project plan, and that solid operational data are collected in line with the agreed monitoring plan. The project owner is usually also in charge of leading the stakeholder management which includes the stakeholder consultations, obtaining carbon rights waivers, establishing and implementing an input and grievance mechanism.

- The responsibility of the carbon project developer is to propose the carbon strategy (including selection of carbon standard and methodology), lead the preparation of all documents to be submitted to an auditor and the carbon standard, provide guidance when establishing and refining the monitoring plan, and lead the marketing and sales of the carbon credits.

Ask in your network about recommendations for carbon project developers. Ideally, you can shortlist about three potential developers that have experience with your type of project, have a presence or experience working in Bangladesh, and ideally also act as a carbon credit retailer. Reach out to them with a short description of your intervention and state your interest in collaboration. Likely the carbon project developer will get back to you with some additional questions (possibly sharing a standardised form or requesting a meeting). Within a few weeks you can expect to get feedback on whether the carbon project developers are interested to collaborate, and to get a first rough estimate of the emission reduction potential of your intervention.

Tip: the carbon project developers will likely try to get you interested to move ahead - and may share rather optimistic estimates of the emission reduction potential. As a rule of thumb, check if you would still want to move ahead if you only achieved 25 - 50% of the emission reductions and if the process to get first revenue takes double as long as proposed. If that's a clear yes - move ahead!

There are different contracting options, and it is up to you (as the project owner) and the carbon project developer to explore what option is most suitable in your specific context.

- The carbon project developer covers the full cost of the carbon certification as well as marketing and sales of the carbon credits - while your company covers the cost for project implementation and monitoring. This is a low-risk option for you (because much of the investments for the certification are covered by the carbon project developer) and the carbon project developer has a direct business interest to make the certification work and optimise the revenue. However, this option has the disadvantage that the carbon project developer may take as much as half of the carbon revenue after deduction of third-party costs.

- Your company hires a carbon project developer to support the technical aspects of the carbon certification, and you pay a consultancy fee to the developer. However, unlike in the option above, the carbon credits will be issued to your own registry, and sales and marketing are done in-house or through a carbon broker. In this option you keep full ownership of the carbon credits, but the disadvantage is that you have to make actual direct investments into the certification, and you may struggle selling the carbon credits once issued - as you probably do not have a network of interested buyers.

- You may also agree on any mix of the two options described above. In few cases, it may even be possible that the carbon project developer is interested to invest directly into the project implementation and monitoring.

The following points will need to be discussed and agreed upon with a carbon project developer:

- **Ownership of generated carbon credits.** Will the credits be issued to a registry owned by your company or to a registry owned by the carbon project developer? Will ownership change after a certain time (e.g. after the first crediting period)?

- **Sale of generated carbon credits.** Does the carbon project developer sell the carbon credits or just support with the certification? If the carbon project developer sells the credits on your behalf, do they buy all the credits at a pre-agreed fixed price or get a share from the generated revenue? Tip: consider negotiating for a revenue share agreement to benefit from potential price surges and setting a minimum sales price below which the carbon project developer will need your specific approval to sell the credits.

- **Exclusivity.** Will you grant the carbon project developer exclusive rights to sell the carbon credits? If so, for how long (i.e., you may want to limit exclusivity to one or two years after issuance)?

- **Roles and responsibilities.** Who pays for field data collection and who pays for the validation, verification and carbon standard fees? Who is responsible to ensure compliance with Bangladesh's rules for voluntary carbon projects? Who prepares and conducts the data collection? Who responds to the findings of an auditor or carbon standard?

- **Revenue sharing.** What percentage/amount of the revenue will go to your company, how much to the carbon project developer? What costs are deducted before the revenue is split?

Phase 2 - Project documentation and stakeholder consultation

Indicative time requirement: 6 - 12 months
Indicative costs: staff time plus typically EUR 30,000 - 50,000 for carbon consultant (if project is not developed at their risk),
plus costs of baseline survey and stakeholder consultations

Under the leadership of the carbon project developer, you will decide on the carbon standard and carbon methodology. You may also have some final discussions about the specific scope, location, and duration of the activities to be certified. Depending on the selected carbon standard, there may be specific guidance about the stakeholder consultation process, and it may be necessary to obtain approval from the government of Bangladesh to engage in the (voluntary) carbon market. Whatever the carbon standard, you should expect that all stakeholders that are affected by the project have to be informed, and you have to demonstrate how their feedback, concerns and suggestions have been taken into account in the project design.

In this phase, you will also have to establish the baseline scenario, develop a monitoring plan, and demonstrate additionality in accordance with the selected methodology. All of this is then summarised in a Project Design Document (PDD) and possibly additional supporting documents (e.g., a report on local stakeholder consultation, a spreadsheet for calculating emission reductions).

Note: carbon credits are based on projects. Even if you have on-going expansion of your operations, you will need to "package" them into individual projects. This can be by geographical area or by time of enrolment or service provision. Your impact monitoring system may need to be adjusted so that you can easily extract data for specific carbon projects.

Phase 3 - Validation and registration

Indicative time requirement: 6 - 12 months
Indicative costs: staff time plus typically EUR 20,000 - 40,000 for carbon consultant (if project is not developed at their risk),
fees for auditor and the carbon standard

The carbon project developer (or your company) will submit the draft PDD for a preliminary review by the carbon standard and for validation by a third-party auditor. The auditor (usually referred as the Validation and Verification Body, or VVB) validates the project eligibility, baseline scenario, and monitoring plan against the rules and principles of the carbon standard and the carbon methodology. The validation may also include a site visit by the VVB.

After an initial review, the VVB will typically share a list of points for clarification or corrective action, and once all are resolved the VVB will issue a final validation report. Following a final check of the validation report by the carbon standard,

your project will be formally registered. The registration is typically valid for a period of five years (also called the "certification period"), after which the PDD must be updated, and the registration renewed.

Phase 4 - Monitoring and reporting

Indicative time requirement: 12 months
Indicative costs: staff time plus typically EUR 10,000 - 20,000 for carbon consultant (if project is not developed at their risk), plus costs of monitoring

You will now have to collect monitoring data as specified in the monitoring plan in the PDD. Ideally, this is fully aligned with your impact monitoring system. In some cases, you may also have to track indicators related to safeguards issues, and to collect and address inputs and complaints from stakeholders. After a certain period (i.e., the "monitoring period"), the carbon project developer, with your support, will prepare a monitoring report and calculate the actual emission reductions achieved. There is some flexibility in the length of the monitoring period (although certain rules in the standard and methodology must be followed), but they are typically prepared every one to two years.

Phase 5 - Verification and issuance

Indicative time requirement: 6 - 12 months
Indicative costs: staff time plus typically EUR 15,000 - 30,000 for carbon consultant (if project is not developed at their risk),
fees for auditor and the carbon standard

The monitoring report, emission reduction calculation, and supporting documentation can now be submitted to a third-party auditor. The VVB will verify the carbon credit claims against the registered monitoring plan and the rules and principles of the carbon standard and methodology. The verification may require a site visit by the VVB. Upon receipt of a final verification report, the carbon standard conducts a final review of the monitoring report before formally issuing carbon credits.

Phase 6 - Selling carbon credits

Indicative time requirement: 6 - 12 months (possibly longer)
Indicative costs: staff time and/or broker fees

Once carbon credits are issued, they can be sold to interested buyers. This may be done by the carbon project developer, by your company or a marketing platform to be established for impact enterprises in Bangladesh. Depending on the type of project, the capacity of the carbon credit trader, the demand for carbon credits, and price expectations, it may take several years to sell (and thus monetise) all of the issued carbon credits. The sales margin for carbon credit trading depends on the investment and risks taken by the carbon credit retailer and is typically between 10% and 50% of the total revenue from the sale of carbon credits, but could be higher if, for example, an investor covers the full costs of project implementation and carbon certification. Buyers typically retire the credits to substantiate environmental claims, but some buyers (or traders) may hold credits in their registries and resell them later.

CLIMATE VOCABULARY

Accounting boundaries (or operational boundaries). The boundaries that determine the direct and indirect emissions associated with operations owned or controlled by the reporting company. This assessment allows a company to establish which operations and sources cause direct and indirect emissions, and to decide which indirect emissions to include that are a consequence of its operations. *Resource library [3].*

Activity data. Quantification of activities performed by a company or intervention (e.g., fuel or electricity use within a certain time period, total number of products sold). GHG emissions can be quantified by multiplying activity data with corresponding emission factors.

Adaptation. Any initiatives or actions in response to actual or projected climate change impacts and which reduce the effects of climate change on built, natural and social systems. *Resource library [2].*

Additionality. A criterion for assessing whether a project has resulted in GHG emission reductions or removals in addition to what would have occurred in its absence. This is an important criterion when the goal of the project is to offset emissions elsewhere. *Resource library [3].*

Carbon accounting. Systematic tracking and quantification of an organization's GHG emissions.

Carbon credit. Carbon credits are the basic unit of carbon markets, each representing a metric ton of carbon dioxide (or its equivalent in other greenhouse gases) that has been kept from entering the atmosphere. 1 ton of CO2 = 1 Carbon . *Resource library [14].*

Carbon standard. Refers to an entity that provides rules and procedures for generating carbon credits from climate change mitigation projects, issues and tracks carbon credits issued from such projects in a registry and ensures that each carbon credit is used only once by issuing notices for "retired" carbon credits. Examples include the Gold Standard or VCS/VERRA. *Resource library [14].*

Climate finance. Typically refers to any type of finance linked to climate impacts.

Carbon finance. Typically refers to revenue generated through carbon credits.

Carbon footprint. A measure of GHG emissions for an individual, event, organization, service, place or product. *Resource library [1].*

Carbon handprint. A measure of how much products and services are helping others to cut their GHG emissions. *Resource library [1].*

Carbon markets. Include compliance (mandatory) carbon markets that involve entities legally obligated to offset their emissions, regulated by international, regional, or sub-national schemes such as the Clean Development Mechanism, the European Union Emissions Trading Scheme, and the California Carbon Market, and voluntary carbon markets that allow private entities and individuals to purchase carbon offsets on a voluntary basis, functioning parallel to the compliance markets. *Resource library [14].*

Carbon ownership. To avoid double counting, "ownership" of the carbon emission reductions needs to be clearly defined and understood by everyone involved. *Resource library [18].*

Double counting. Two or more reporting companies [or entities] take ownership of the same emissions or reductions. *Resource library [3].*

Emission factor. A factor allowing GHG emissions to be estimated from a unit of available activity data (e.g. tonnes of fuel consumed, tonnes of product produced) and absolute GHG emissions. *Resource library [3].*

Greenhouse gases. The GHG protocol includes reporting on the six gases listed in the Kyoto Protocol: carbon dioxide (CO2); methane (CH4); nitrous oxide (N2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF6). *Resource library [3].*

Mitigation. The promotion of policy, regulatory and project-based measures that contribute to the stabilization or reduction of greenhouse gas concentrations in the atmosphere. *Resource library [2].*

Net Zero Science Based Target. A corporate climate target that goes beyond a Science Based Target by committing to neutralise and permanently remove any residual emissions at the target year. *Resource library [8].*

Permanence. Carbon credits must be associated with the permanent avoidance or permanent enhanced removal of GHG emissions. If a project that only temporarily stores carbon (e.g., by sequestering it in trees or soils) substitutes for activities that permanently avoid carbon emissions (e.g. by reducing fossil fuel use), environmental integrity will be undermined. *Resource library [18].*

Scope 1 emissions. Direct GHG emissions occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc., emissions from chemical production in owned or controlled process equipment. *Resource library [3].*

Scope 2 emissions. GHG emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organizational boundary of the company. *Resource library [3].*

Scope 3 emissions. Scope 3 emissions are a consequence of the activities of the company but occur from sources not owned or controlled by the company. Some examples of scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of sold products and services. Optional reporting category for SMEs. *Resource library [3] and [9].*

Science Based Targets. Corporate climate targets that ensure companies aim to operate within planetary boundaries. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels. *Resource library [8].*

ABBREVIATIONS

GHG	Greenhouse gas
IRMF	Impact-Ready Matching Fund
NAP	National Adaptation Plan
SBTi	Science Based Target initiative
SME	Small and Medium-sized Enterprises
tCO2eq	Metric tonnes of carbon dioxide equivalents
VVB	Validation and Verification Body

RESOURCE LIBRARY

[1] Carbon handprint and carbon footprint explained

[2] Finding the nexus: exploring climate change adaptation and mitigation

[3] GHG Protocol Corporate Accounting and Reporting Standard

[4] Corporate Value Chain (Scope 3) Accounting and Reporting Standard

[5] Carbon Handprint Guide

[6] Private sector initiative database

[7] National Adaptation Plan of Bangladesh

[8] SBTi Corporate Net Zero Standard

[9] SBTi SME Frequently Asked Questions

[10] Emission factors (Annex I)

[11] Technical Guidance for Calculating Scope 3 Emissions

[12] Carbon methodologies (Annex II)

[13] CLEAR Methodology for Cooking Energy Transition

[14] WASH carbon financing

[15] EV Charging Carbon Credit Project Factsheet

[16] Building and Scaling Nature-based Carbon Credits for Smallholders

[17] Theory of Change Approach to Climate Change Adaptation

[18] Securing Climate Benefit: A Guide to Using Carbon Offsets

[19] Scope 3 Value Chain Interventions Guidance

[20] The GHG Protocol for Project Accounting

[21] Apparel & Footwear Value Chain Intervention Guidance

[22] Integrating the Circular Economy and Scope 3 in the Apparel & Footwear Sector

ANNEX I - EMISSION FACTORS

This annex provides an overview of values that are likely most relevant for impact enterprises in Bangladesh.

GHG Protocol Emission Factors *(Link)*:

Activity	Emission factor	Unit
Motor Gasoline/Petrol	0.00229	tCO2/L of fuel
On-Road Diesel Fuel	0.00291	tCO2/L of fuel
Wood or wood waste	0.0017472	tCO2/kg of fuel
Charcoal	0.003304	tCO2/kg of fuel

Greenhouse Gas Emissions Factors for International Grid Electricity *(Link)*:

Activity	Emission factor	Unit
Motor Gasoline/Petrol	0.00229	tCO2/L of fuel

ANNEX II - CARBON METHODOLOGIES

This annex provides links to "methodologies" that are used to quantify greenhouse gas emission reductions for some of the most popular carbon standards:

Gold Standard (GS):
https://globalgoals.goldstandard.org/400-sdg-impact-quantification/

Voluntary Carbon Standard (VCS) / Verra:
https://verra.org/methodologies-main/

Clean Development Mechanism (CDM):
https://cdm.unfccc.int/methodologies/index.html

Selected examples of carbon methodologies that may be relevant for impact enterprises in Bangladesh (list is not exhaustive):

Project type	Name of methodology	Link
Safe drinking water	Gold Standard methodology for emission reductions from safe drinking water supply	*Link*
Biogas production from animal manure	AMS-III.D. Methane recovery in animal manure management systems	*Link*
Biogas production from animal manure	Gold Standard methodology for animal manure management and biogas use for thermal energy generation	*Link*
Regenerative agriculture	VM0042 Improved agricultural land management	*Link*
Plastic recycling	VMR0007 Revision to AMS-III.AJ.: Recovery and Recycling of Materials from Solid Wastes	*Link*
Electric vehicles	VM0038 Methodology for Electric Vehicle Charging Systems	*Link*

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