

How to Guide Short-Hand Tool to Assess Project Funding Sources

*developed by GlobalDF with the support of
the Covenant of Mayors in Sub-Saharan Africa, GIZ, and the European Union*



Background

- A project's risk and revenue profile largely determine what funding sources or mechanisms it will be able to access. Credit enhancements can also be used to mitigate some of the risks or increase the project's revenue certainty, allowing the project to access more commercial sources of funding. This short-hand tool is designed to help project owners understand what funding sources or mechanisms may be most appropriate for their projects.
- Six project fundamentals are assessed and scored to arrive at an average score that indicates the type of funding that may be suitable for the project.
 - **Revenue certainty** is likely to be the key determinant for raising debt as financiers will want to ensure that the project generates sufficient revenues to cover debt repayments even under adverse conditions as well as provide adequate returns.
 - Four other project fundamentals are assessed to the extent to which the project's risks can be managed or mitigated from operational, capital expenditure, technology and social/environmental perspectives: **Ability to mitigate operational (OPEX) risks, ability to manage capital expenditure (CAPEX) risks, acceptance of technology risks, and ability to manage environmental and social risks.**
 - The last project fundamental is the **ability access credit enhancements** as they can reduce the risk for debt providers (i.e., lenders and bond investors) by covering default risk and cover equity investors seeking protection against investment risk, covering losses on their investment.

INPUTS: How Users can Use the Tool

A User answers questions related to the project's six fundamentals (see below example of rows 17 to 29). A scale from 0-5 is used by the User: A "yes" response equals 5 points, a "maybe" response 3 points, and a "no" response zero points. An average score is calculated for each of the six project fundamentals. The example below shows two of the six project fundamentals: (1) revenue certainty and (2) ability to manage operational risk, with the User's answers totalling 2.4 and 2.7 respectively.

| | User selects answer | Score | Questions | Score guide |
|----|--|-------|--|--------------------------|
| 16 | Project fundamentals | | | |
| 17 | Revenue certainty | | | |
| 18 | No | 0 | Will the LG be able to reallocate electricity and maintenance savings to pay the private sector for retrofits or can public lighting tariffs be implemented or expanded to pay for new public lighting | Yes=5 Maybe=3 No=0 |
| 19 | Maybe | 3 | Are there significant opportunities to earn advertising revenue by renting out spaces on lighting poles? | |
| 20 | No | 0 | Can the LG make availability payments to the private sector or guarantee minimum payments? | |
| 21 | Maybe | 3 | Can future savings be estimated reliably as future tariffs are likely to be fairly predictable? | |
| 22 | Yes | 5 | Does the LG have a good track record of paying suppliers on time and in full? | |
| 23 | Maybe | 3 | Is the LG's balance sheet strong enough to attract investment from the private sector? | |
| 24 | Yes | 5 | Are the total hours of illumination known over the contract period? | Yes=5 Maybe=3 No=0 |
| 25 | No | 0 | In respect of solar projects, are irradiation levels favourable and known? | |
| 26 | Ability to mitigate operational risks | | | |
| 27 | Yes | 5 | Are the suppliers of inputs such as lamps or PV panels able to guarantee quantity and quality under contract? | Yes=5 Maybe=3 No=0 |
| 28 | Maybe | 3 | Are operational costs likely to be predictable? | |
| 29 | No | 0 | Will revenues or savings achieved (by new project) be enough to cover operational costs? | |

User inputs answer in response to questions

Score generated from answers input by User

Questions listed here are relevant to public street lighting projects

Full list of Questions for User Input on 6 Fundamentals of Public Lighting Projects

| Project fundamentals | Score (0 to 5) | Clarification | Score guide |
|---|----------------|---|--|
| Revenue certainty | | | |
| Cost recovery through user payments/savings | | Will the LG be able to reallocate electricity and maintenance savings to pay the private sector for retrofits? Can public lighting tariffs be implemented or expanded to pay for new public lighting projects? | Yes=5,Maybe=3,No=0 If not applicable, "n/a" |
| Opportunities for generating 3rd party revenue | | Are there significant opportunities to earn advertising revenue by renting out spaces on lighting poles? | |
| Ability of LG to guarantee revenue | | Can the LG make availability payments to the private sector or guarantee minimum payments? | |
| Ability to manage tariff risk | | Can future savings be estimated reliably as future tariffs are likely to be fairly predictable? | |
| Creditworthiness of key off-takers | | Does the LG have a good track record of paying suppliers on time and in full? Is the LG's balance sheet strong enough to attract investment from the private sector? | |
| Predictability of demand | | Are the total hours of illumination known over the contract period? | |
| Predictability of supply | | In respect of solar projects, are irradiation levels favourable and known? | |
| Ability to mitigate operational risks | | | |
| Ability of supplier to ensure required inputs (quantities, quality) | | Are the suppliers of inputs such as lamps or PV panels able to guarantee quantity and quality under contract? | Yes=5,Maybe=3,No=0 If not applicable, "N/A" |
| Predictability of costs | | Are operational costs likely to be predictable? | |
| Likelihood of recovering opex via revenue/savings | | Will revenues or savings achieved (by new project) be enough to cover operational costs? | |
| Ability to manage CAPEX risks | | | |
| Ability to recover CAPEX investment via revenue | | Will revenue generated by the project be enough to first cover operational costs and then also repay the upfront investment? | Yes=5,Maybe=3,No=0 If not applicable, "N/A" |
| Ability to transfer construction risk to private sector | | Can construction risk be transferred to the private sector via a turnkey contract or another measure? | |
| Acceptance of technology risks | | | |
| Acceptance of technology by lenders | | Is this a tried and tested technology that lenders will be comfortable with? | Yes=5,Maybe=3,No=0 If not applicable, "N/A" |
| Suitability as collateral for commercial lenders | | Will lenders be able to find a buyer for the project (under a PPP) if the private sector partner goes bankrupt? | |
| Ability to manage environmental/social risks | | | |
| Ability to minimise environmental impact/costs | | Are environmental approvals already in place, reducing the risk of delays? | Yes=5,Maybe=3,No=0 If not applicable, "N/A" |
| Ability to minimise social impact/costs | | Are communities supportive of the project and are they willing to pay taxes (if relevant)? | |
| Access to credit enhancement | | | |
| Availability of guarantees | | Can the project access any guarantees from national/LG/DFIs to improve revenue certainty? | Yes=5,Maybe=3,No=0 If not applicable, "N/A" |
| Average | | CALCULATE AVERAGE OF SCORES | |

Other Example: Questions on the Six Fundamentals for Integrated Waste Management Projects

| Project Fundamentals | Score (0 to 5) | Clarification | Score guide |
|--|----------------|--|--|
| Revenue certainty | | | |
| Cost recovery through user payments/savings | | Will fees from wastewater collectors cover costs? Will savings achieved by LG (if PPP) cover costs? | Yes=5,Maybe=3,No=0 If not applicable, "n/a" |
| Opportunities for generating 3rd party revenue | | Are there significant opportunities to earn revenue from the sale of electricity, biogas, fertilizer etc? | |
| Ability of LG to guarantee revenue | | Is LG able to provide guarantees to the private sector in respect of sales of products or availability payments to the private sector? | |
| Ability to manage tariff risk | | If electricity is produced, will the project have certainty over what it can sell the electricity at in future? | |
| Creditworthiness of off-taker(s) | | Are there potential off-takers that are large, profitable businesses (factories, farms, etc)? | |
| Predictability of demand | | Is demand for treated water likely to be predictable? | |
| Predictability of supply | | Is the supply of wastewater likely to be predictable? | |
| Ability to mitigate operational (OPEX) risks | | | |
| Ability of LG to guarantee feedstock | | Does LG understand volumes well enough to guarantee volumes to the private sector? Is your LG allowed to issue guarantees? | Yes=5,Maybe=3,No=0 If not applicable, "N/A" |
| Predictability of costs (including FX, etc.) | | Are operational costs likely to be predictable? | |
| Likelihood of recovering opex via revenue/savings | | Will revenues (from sale of electricity, biogas etc) or savings achieved (by new project) be enough to cover operational costs? | |
| Ability to manage capital expenditure (CAPEX) risks | | | |
| Ability to recover CAPEX investment via revenue | | Will revenue generated by the project be enough to first cover operational costs and then also repay the upfront investment? | Yes=5,Maybe=3,No=0 If not applicable, "N/A" |
| Ability to transfer construction risk to private sector | | Can construction risk be transferred to the private sector via an EPC contract or another measure? | |
| Acceptance of technology risks | | | |
| Acceptance of technology by lenders | | Is this a tried and tested technology that lenders will be comfortable with? | Yes=5,Maybe=3,No=0 If not applicable, "N/A" |
| Suitability as collateral for commercial lenders | | Will lenders be able to find a buyer for the project (under a PPP) if the private sector partner goes bankrupt? | |
| Ability to manage environmental/social risks | | | |
| Ability to minimise environmental impact/costs | | Are environmental approvals already in place, reducing the risk of delays and expensive studies? | Yes=5,Maybe=3,No=0 If not applicable, "N/A" |
| Ability to minimise social impact/costs | | Will there be little or no impact on the surrounding community? Will the surrounding community accept a WWT&R facility nearby? | |
| Access to credit enhancements | | | |
| Availability of guarantees and other enhancements | | Can the project access any guarantees or other credit enhancements to improve revenue certainty? | Yes=5,Maybe=3,No=0 If not applicable, "N/A" |
| Average | | CALCULATE AVERAGE OF SCORES | |

OUTPUTS: How the Tool Generates Indications of Funding Sources

The top part (rows 3 to 14) summarises the outputs of the scoring exercise and indicates the types of funding that the project is likely to attract based on its project fundamentals.

| | A | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | AA | AB | AC | AD | AE | AF | AG | AH | AI | AJ | AK | AL | AM | AN | AO | AP | AQ | AR | AS | AT | AV | AW | AX | AY | AZ | BA | BB | BC | BD | BE | BF | BG | BH | BI | BJ | BK | BL | BM | BN | BO | BP | BQ | BR | BS | BT | BU | BV | BW | BX | BY | BZ | CA | CB | CC | CD | CE | CF | CG | CH | CI | CJ | CK | CL | CM | CN | CO | CP | CQ | CR | CS | CT | CU | CV | AW | AX | AY | AZ | BA | BB | BC | BD | BE | BF | BG | BH | BI | BJ | BK | BL | BM | BN | BO | BP | BQ | BR | BS | BT | BU | BV | BW | BX | BY | BZ | CA | CB | CC | CD | CE | CF | CG | CH | CI | CJ | CK | CL | CM | CN | CO | CP | CQ | CR | CS | CT | CU | CV | CW | AX | AY | AZ | BA | BB | BC | BD | BE | BF | BG | BH | BI | BJ | BK | BL | BM | BN | BO | BP | BQ | BR | BS | BT | BU | BV | BW | BX | BY | BZ | CA | CB | CC | CD | CE | CF | CG | CH | CI | CJ | CK | CL | CM | CN | CO | CP | CQ | CR | CS | CT | CU | CV | CW |
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| 2 | PUBLIC STREET LIGHTING PROJECT TYPOLOGY TOOL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Project fundamentals | Score | Weight | Low =0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | High = 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Revenue certainty | 2.4 | 30% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Ability to mitigate operational risks | 2.7 | 13% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Ability to manage CAPEX risks | 1.5 | 13% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Acceptance of technology risks | 3.0 | 13% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Ability to manage env./social risks | 4.0 | 13% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Access to credit enhancement | 3.0 | 20% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Weighted score | 2.7 | 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Generic funding mechanisms | | | Grants (Govt. & ODA) | | | | | | | | | | | | Blended finance & impact investment | | | | | | | | | | | | PPP + grant /blended finance | | | | | | | | | | | | PPP, project bonds | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Climate funding mechanisms | | | Grants | | | | | | | | | | | | Concessionary loans & grants | | | | | | | | | | | | Green bonds, equity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Scores calculated based on the questions answered by the user (see rows 18 to 40 on next page)

Weighted average score calculated based on the weights assigned to the 6 different project fundamentals

The example on the next page shows a project with a weighted average score of 2.7 which indicates that blended finance & impact investment should be targeted to fund the project

Weighted average score indicates which types of funding the project is most likely to attract

INTERPRET THE PROJECT'S AVERAGE SCORES

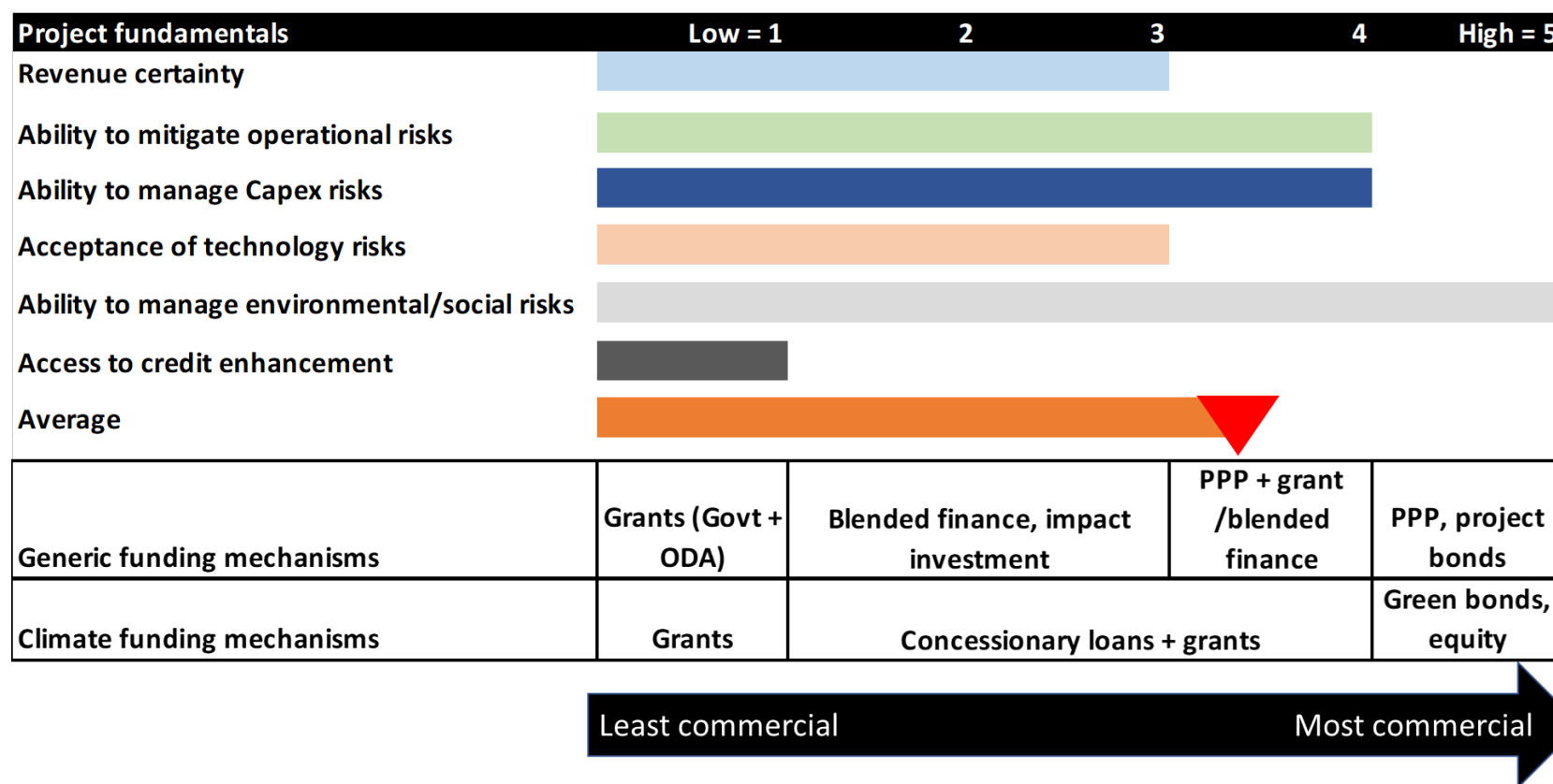
The average score of project fundamentals is below.

2.7

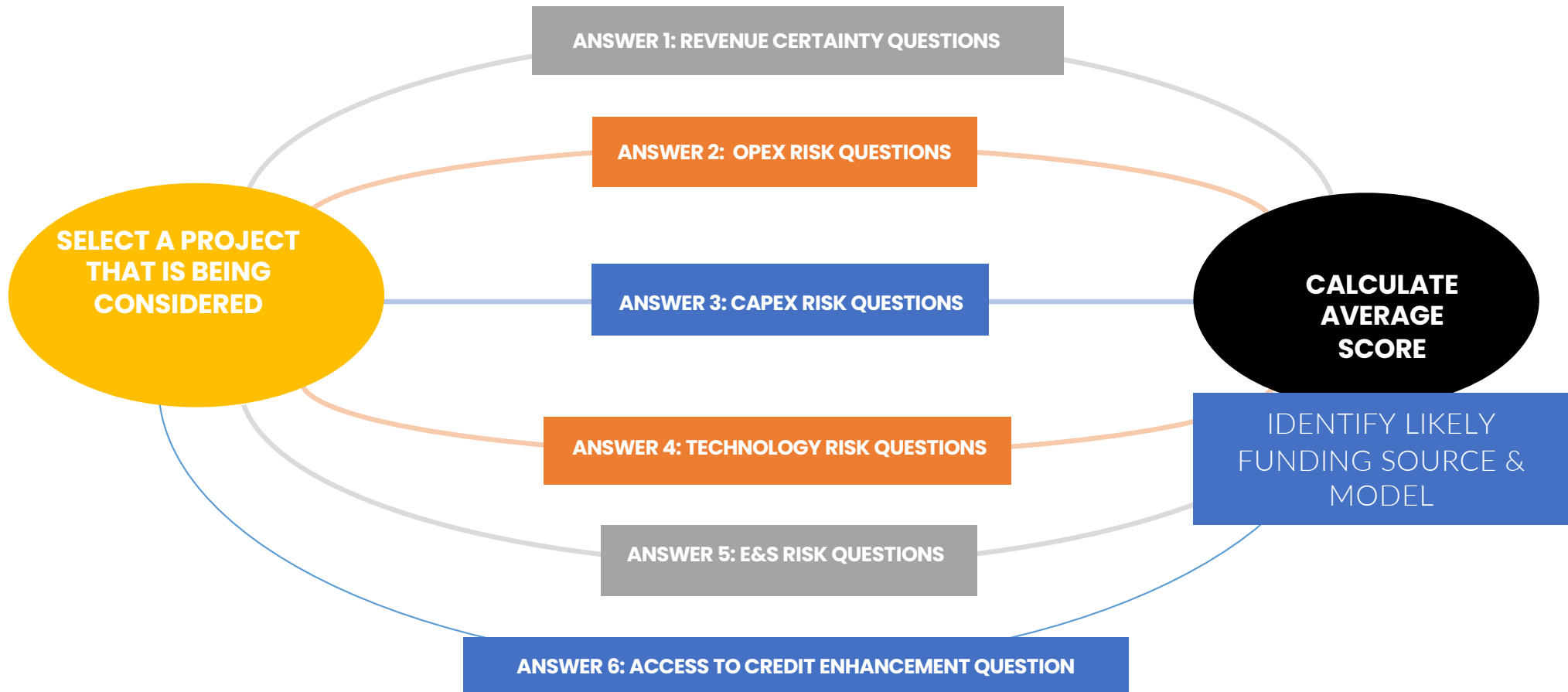
| Project fundamentals | Low = 0 | Medium =3 | | High =5 |
|-----------------------------------|----------------------------|---|------------------------|-----------------------|
| Generic funding mechanisms | Grants (Govt + ODA) | Blended finance, impact investment | Commercial debt | Corporate bond |
| Climate funding mechanisms | Grants | Concessionary loans + grants | | Equity |

Another Example of How the User's Assessment of Project Fundamentals Indicates Possible Funding Sources

In the example below, an average score of 3.3 was calculated from the user inputs indicating that the project may be viable using a PPP provided it can access grants or blended finance. From a climate finance perspective, the project may be able to access concessionary loans and grants.



EXERCISE: APPLY TYPOLOGY TO A PROJECT



For more information, please contact GlobalDF through the website contact form on www.globaldf.org

*If interested in supporting the use of tool and its improvement, please contact
Dr. Barbara Samuels, Executive Director of GlobalDF at barbara@globaldf.org*