



**VIABILITY GAP FUNDING BASED
SUSTAINABLE ENERGY CHALLENGE FUND**

Concept Note Format

1. Applicant Data	
Applicant Name (Lead applicant) *	
Street number and name*	
Ward number	
Town or municipality	
Zip code	
Telephone*	
Email*	
Key Contact Person: *	
Applicant organizations are either owned and/or led by *	☐ Female ☐ Disadvantaged ☐ None
If yes please explain how the organization is owned and/or led by female and/or disadvantaged person *	
Are you in a Consortium? *	☐ Yes ☐ No
If Yes, Name of the consortium members*	
Type of company	
Company Registration no*	
Company Registration date (YYYY-MM-DD) *	
PAN/VAT Number: *	
Major objectives of the company and key business areas	
Name of Major shareholders/ Partners*	
Name of Directors*	
Number of employees	
Details of past assistance from Development Partner including (former DFID) BEK	
Has your company audited in the last two or three years (external)	



If Yes name of the auditors (Year wise) *		
2. Project Data – Part I		
Project province*	☐ 2, ☐ Lumbini, ☐ Karnali	
Project's geographical coordinates		
Type of renewable energy (RE) system	☐ On-Grid, ☐ Off-Grid	
Project's renewable energy (RE) source *	☐ Solar Photovoltaics, ☐ Solar Thermal, ☐ Wind Energy System, ☐ Hybrid System, ☐ Large Biogas, ☐ Micro and Mini Grid, ☐ Clean Cooking , ☐ Clean Fuel, ☐ Energy Storage System ☐ Others (Pls. specify)	
Other renewable energy (RE) technology*		
3. Technical Data		
Solar Photovoltaics Project's renewable energy (RE) technology*	☐ Solar Home System ☐ Institutional Solar ☐ Solar Water Pumping System ☐ Solar Refrigeration ☐ Solar PV Rooftop ☐ Solar Mini Grid ☐ Solar PV Net metered ☐ Solar PV Utility Scale Solar ☐ Others (Pls. specify)	
If following Solar Photovoltaics technologies are chosen from above list, please provide below mentioned information ☒ Solar Home System ☒ Institutional Solar ☒ Solar Water Pumping System ☒ Solar Refrigeration ☒ Solar PV Rooftop ☒ Others (Pls. specify)		
Technical Features		
PV panel capacity *	Wp	
Capacity of Refrigerator * (If Solar Refrigeration is chosen)	Liters	



Add PV refrigerators of different capacities	
Numbers per Panels	
Add PV panels of different capacities and numbers	
Total Watt Peak of Systems *	Wp
Total Number of Systems *	
Current Source of Energy	
Current sources of Energy (Multiselect) *	☐ Kerosene, ☐ Diesel, ☐ Grid, ☐ Others (Pls. specify)
If following Solar Photovoltaics technologies are chosen from above list, please provide below mentioned information ☒ Solar Mini Grid ☒ Solar PV Net metered ☒ Solar PV Utility Scale Solar	
Technical Features	
Proposed Installed Capacity *	Wp
Capacity Factor *	%
Annual Energy Generation *	kWh
Current Source of Energy	
Current sources of Energy (Multiselect) *	☐ Kerosene, ☐ Diesel, ☐ Grid, ☐ Others (Pls. specify)
Proposed % of electricity consumption contributed by this investment? self-consumption/local supply *	
Proposed % of electricity sales to grid contributed by this investment	
Solar Thermal	☐ Solar Dryer ☐ Solar Cooker ☐ Solar Water Heater ☐ Solar Thermal - Others
If following Solar Thermal technologies are chosen from above list, please provide below mentioned information ☒ Solar Dryer ☒ Solar Cooker ☒ Solar Water Heater ☒ Solar Thermal - Others	
Technical Features	
Model *	
Solar Dryer/ Others - Type (Multi Select) *	☐ Direct, ☐ Indirect
Solar Cooker - Type (Multi Select) *	☐ Absorption, ☐ Concentration
Solar Water Heater - Type (Multi Select) *	☐ Vacuum Tube, ☐ Flat plate
Numbers *	



Add models of different types and numbers	
Current Source of Energy	
Current sources of Energy (Multiselect) *	☐ Open Sun drying, ☐ Biomass, ☐ LPG, ☐ Firewood ☐ Electricity ☐ Others (Pls. specify)
Wind Energy System	☐ Wind Energy Utility Scale ☐ Wind Energy - Others
If following Wind Energy System technologies are chosen from above list, please provide below mentioned information ☒ Wind Energy Utility System ☒ Wind Energy - Others	
Technical Features	
Capacity *	kW
Capacity Factor *	%
Annual Energy Generation *	kWh
Current Source of Energy	
Current sources of Energy (Multiselect) *	☐ Kerosene, ☐ Others (Pls. specify)
Hybrid System	☐ Solar Wind Hybrid
Technical Features	
Capacity of Solar PV System *	kWp
Capacity Factor of Solar PV System *	%
Capacity of Wind Energy System *	kW
Capacity Factor of Wind Energy System *	%
Annual Energy Generation *	kWh
Current Source of Energy	
Current sources of Energy (Multiselect) *	☐ Kerosene, ☐ Others (Pls. specify)
Large Biogas	☐ Large Biogas – Electricity Generation ☐ Large Biogas – Thermal Use
If following Large Biogas technologies are chosen from above list, please provide below mentioned information ☒ Large Biogas – Electricity Generation	
Technical Features	
Plant Size *	Cu.m.
Capacity of Generator *	kW
No. of Operational hours/year *	Hours
Annual Energy Generation *	kWh
Current Source of Energy	
Current sources of Energy (Multiselect) *	☐ Diesel, ☐ Grid,



	☐ Others (Pls. specify)
Proposed % of electricity consumption contributed by this investment? self-consumption/local supply *	
Proposed % of electricity sales to grid contributed by this investment	
If following Large Biogas technologies are chosen from above list, please provide below mentioned information ☒ Large Biogas – Thermal Use	
Technical Features	
Purpose (Multiselect) *	☐ Self-Consumption, ☐ Commercial
Mode of Distribution	☐ Gas Cylinders, ☐ Pipeline distribution ☐ Gas Station
Plant Size *	Cu.m.
Gas meter reading *	Cu.m.
Annual Energy Generation *	kWh [Conversion using (gas meter reading*1.02264*40)/3.6]
Current Source of Energy	
Current sources of Energy (Multiselect) *	☐ Diesel, ☐ Grid, ☐ Others (Pls. specify)
Proposed % of electricity consumption contributed by this investment? self-consumption/local supply *	
Proposed % of electricity sales to grid contributed by this investment	
Micro and Mini Grid	☐ Hydro
If following Micro and Mini Grid technologies are chosen from above list, please provide below mentioned information ☒ Hydro	
Technical Features	
Proposed installed Capacity *	kW
Operating day/year *	
Operating hours/day *	
Annual Energy Generation *	kWh
Type of Support needed (Multiselect) *	☐ System Improvement ☐ Grid interconnection
If System Improvement (Multiselect) *	☐ Management Improvement ☐ Technical Improvement
Current Source of Energy	
Alternative sources of Energy (Multiselect) *	☐ Small House System (SHS), ☐ Kerosene, ☐ Others (Pls. specify)



Clean Cooking	☐ Clean Cooking - Biomass ☐ Clean Cooking – Biogas ☐ Clean Cooking – Electric ☐ Clean Cooking – Others
If following Clean Cooking technologies are chosen from above list, please provide below mentioned information ☒ Clean Cooking - Biomass	
Technical Features	
Numbers *	.
Types of Stoves (Multiselect) *	☐ Metallic Improved Cook Stoves ☐ Rocket Stoves ☐ Gasifier Stoves
If Rocket Stoves (Multiselect) *	☐ Portable Metallic (Please specify tier level and model) ☐ Composite (Mud + Metal) (Please specify tier level and model)
If Gasifier Stoves (Multiselect) *	☐ Up draft ☐ Down draft ☐ Cross draft
NIBC Compliant? *	☐ Yes ☐ No
Numbers *	
Current Source of Energy	
Current sources of Cooking fuels in Households/MSMEs (Multiselect) *	☐ LPG ☐ Firewood, ☐ Loose Biomass, ☐ Electricity, ☐ Others (Pls. specify)
If following Clean Cooking technologies are chosen from above list, please provide below mentioned information ☒ Clean Cooking - Biogas	
Technical Features	
Plant Size *	Cu.m.
Number per Plant Size *	kW
Gasmeter reading per plant size *	
Add plant sizes of different gasmeter readings and numbers	
Annual Energy Generation *	kWh
Current Source of Energy	
Current sources of Cooking fuels in Households/MSMEs (Multiselect) *	☐ LPG ☐ Firewood, ☐ Loose Biomass, ☐ Electricity, ☐ Others (Pls. specify)



If following Clean Cooking technologies are chosen from above list, please provide below mentioned information ✓ Clean Cooking - Electric	
Technical Features	
Clean Cooking Type (Single select) *	☐ Induction ☐ Infrared ☐ Hot plate, ☐ Electric Pressure Cooker, ☐ Others (Pls. specify)
Number of units *	
Current Source of Energy	
Current sources of Cooking fuels in Households/MSMEs (Multiselect) *	☐ LPG ☐ Firewood, ☐ Loose Biomass, ☐ Electricity, ☐ Others (Pls. specify)
If following Clean Cooking technologies are chosen from above list, please provide below mentioned information ✓ Clean Cooking - Others	
Technical Features	
Type of Cooking Solution Proposed *	
Number of units *	
Current Source of Energy	
Current sources of Cooking fuels in Households/MSMEs (Multiselect) *	☐ LPG ☐ Firewood, ☐ Loose Biomass, ☐ Electricity, ☐ Others (Pls. specify)
Clean Fuel	☐ Pellets ☐ Charred Briquettes ☐ Non - Charred Briquettes ☐ Others (Pls. specify)
If following Clean Fuel technologies are chosen from above list, please provide below mentioned information ✓ Pellets ✓ Charred Briquettes ✓ Non - Charred Briquettes ✓ Others	
Technical Features	
Annual Production Capacity *	Tons
Targeted Client Base *	
Energy Storage System	☐ Energy Storage System
If following Energy Storage System technologies are chosen from above list, please provide below mentioned information ✓ Energy Storage System	
Project's renewable energy (RE) technology *	Please specify type of battery



Technical Features	
Total Capacity *	AH
Individual Battery Capacity *	AH
Individual Battery Voltage *	V
Number of batteries *	
System Voltage *	V
Number of batteries in series *	
Number of batteries in parallel *	
Source of Energy (Multiselect) *	☐ Grid ☐ Solar PV ☐ Others (Pls. specify)
Please Upload Technical Details file(s)	
Others	☐ Others
If following RE source is chosen from above list, please provide below mentioned information ☒ Others	
Project's renewable energy (RE) technology *	Please provide technology details
Please Upload Technical Details file(s)	
4. Project Data – Part II	
Business model proposed *	☐ RESCO ☐ Asset Owned ☐ Rent to Own ☐ PPP ☐ Others (Pls. specify)
Other business model proposed *	
Objectives of the project *	
Explain how the project addresses above objectives*	
Project start date (tentative) *	
Project commercial operation date (tentative) *	
Project's salient features	
In case of the consortium being formed for this project, how will the project be managed between consortium members?	
5. Project Beneficiaries Information Data	
Beneficiary Information.	



Beneficiaries Target Groups *	☐ Households ☐ Schools ☐ Health Centers ☐ MSMEs ☐ Industries/Commercial Institutions ☐ Others (Pls. specify)
Number of people to be benefited?	
Basis of beneficiaries count	
Gender Male Female Others	
Caste and ethnicity Bahun Chhetri Dalit Janajati/Adhibasi Madhesi Other caste	
Basis of caste and ethnicity count	
Socioeconomic strata Poor	
Basis of poverty count	
Disability inclusion	
Potential for job creation	
Number of potential jobs creation Male Female Others	
If following Beneficiaries Target Groups chosen from above list, please provide below mentioned information ✓ Households	
Total beneficiary households to be covered	
If following Beneficiaries Target Groups chosen from above list, please provide below mentioned information ✓ MSMEs ✓ Industries/Commercial Institutions	
Number of female led enterprises	
Basis of female led enterprises count	
If following Beneficiaries Target Groups chosen from above list, please provide below mentioned information ✓ Others	
Target group name	



6. Economics Data	
Status of the Project development (Select one or more) *	☐ No assessment done ☐ Desk study/initial assessment completed ☐ Pre-feasibility completed ☐ Feasibility Study completed, ☐ Detailed engineering design completed
Please upload the document related to the development status selected above	
In case of commercial project (Is pre-feasibility study or detailed feasibility study completed?)	☐ Yes, ☐ No
Project window * (Select one)	☐ Public Private Partnership, ☐ Demand Aggregation, ☐ Viability Gap Funding, ☐ System Improvement of existing mini/micro grid projects, ☐ Reverse Auction, ☐ Others Innovative ideas
If following Project Window chosen from above list, please provide below mentioned information ☒ Demand Aggregation	
Year 1	
Enter Year in AD	
Market Development and promotion Cost	NPR
End-user investment Costs	NPR
Year 2	
Enter Year in AD	
Market Development and promotion Cost	NPR
End-user investment Costs	NPR
Year 3	
Enter Year in AD	
Market Development and promotion Cost	NPR
End-user investment Costs	NPR
Total market Development and promotion Cost *	NPR
Total end-user investment Costs	NPR
Source of Financing	
Company or Institution's Equity *	NPR
Contribution from Local Government	NPR
Contribution from Provincial Government	NPR
Contribution from Other Sources *	☐ Yes, ☐ No



If Yes, Name of the Development Partner *	
If Yes, Amount of Support from Other Sources *	NPR
Total	NPR
Explain the technical assistance expected from SECF	
Financial support expected from SECF *	NPR
Please upload document to demonstrate your financial calculation with yearly breakdown *	
If following Project Window chosen from above list, please provide below mentioned information	
✓ Reverse Auction	
Proposed equipment cost	NPR
Other project implementation cost	NPR
Total project cost	NPR
Source of Financing	
Company or Institution's Equity *	NPR
Bank Loan	NPR
Contribution from Local Government	NPR
Contribution from Provincial Government	NPR
Contribution from Other Sources *	☐ Yes, ☐ No
If Yes, Name of the Development Partner *	
If Yes, Amount of Support from Other Sources *	NPR
Explain the technical assistance expected from SECF	
Financial support expected from SECF *	NPR
Please upload document to demonstrate your financial calculation with yearly breakdown *	
Total	NPR
If following Project Window chosen from above list, please provide below mentioned information	
✓ Public Private Partnership	
✓ Viability Gap Funding	
✓ Other Innovative Ideas	
Estimated Cost of Project	
Installation cost *	NPR
Other costs	NPR
Total	NPR
Operation and maintenance costs per annum*	NPR
Source of Financing	
Company or Institution's Equity *	NPR
Bank Loan	NPR
Contribution from Local Government	NPR
Contribution from Provincial Government	NPR



Contribution from Other Sources *	☐ Yes, ☐ No
If Yes, Name of the Development Partner *	
If Yes, Amount of Support from Other Sources *	NPR
Total	NPR
Type of support expected from VGF based SECF: * (Select one or more)	☐ Interest Buydown ☐ Generation Based Incentive
If following Support chosen from above list, please provide below mentioned information ✓ Interest Buydown	
% of Interest Buydown Support expected	%
If following Support chosen from above list, please provide below mentioned information ✓ Generation Based Incentive	
Generation Based Incentive per kWh	NPR
Explain the technical assistance expected from SECF	
Financial support expected from SECF *	NPR
Project Budgeting	
Net Present Value	NPR
IRR	%
Payback period (in years)	Years
Please upload document to demonstrate your financial calculation with yearly breakdown	
If following Project Window chosen from above list, please provide below mentioned information ✓ System Improvement of existing mini/micro grid projects,	
Details of system improvement expected *	
Estimated Cost of Project	
Total Project cost *	NPR
Support expected from VGF based SECF (NPR) *	NPR
Source of Financing	
Company or Institution's Equity *	NPR
Bank Loan	NPR
Contribution from Local Government	NPR
Contribution from Provincial Government	NPR
Contribution from Other Sources *	☐ Yes, ☐ No
If Yes, Name of the Development Partner *	
If Yes, Amount of Support from Other Sources *	NPR
Total	NPR
Explain the technical assistance expected from SECF	
Financial support expected from SECF *	NPR
Project Budgeting	



Net Present Value	NPR
IRR	%
Payback period (in years)	Years
Please upload document to demonstrate your financial calculation with yearly breakdown	
7. Financial Status	
FY BS 2074/75 (2017-18)	
Turnover	NPR
Earnings Before Interest & Tax	NPR
Earnings Before Tax	NPR
Net Profits	NPR
Total assets	NPR
Equity	NPR
Loan	NPR
FY BS 2075/76 (2018-19)	
Turnover	NPR
Earnings Before Interest & Tax	NPR
Earnings Before Tax	NPR
Net Profits	NPR
Total assets	NPR
Equity	NPR
Loan	NPR
FY BS 2075/76 (2019-20)	
Turnover	NPR
Earnings Before Interest & Tax	NPR
Earnings Before Tax	NPR
Net Profits	NPR
Total assets	NPR
Equity	NPR
Loan	NPR
Financial Statement of Past 3 years required (Attach Audit Report)	
8. Declaration *	
I hereby certify that we (Lead Organisation): • Are a registeredcompany on(date) with necessary approval/certification and our consortium members are also legally registered in Nepal. • Have the relevant permissions/consents to promote and produce Renewable Energy services in the proposed areas for proposed institution from local governments. • Are willing to abide by the requirements of the VGF based SECF, AEPC and NREP. • Are willing to provide all reasonable information as requested by NREP, VGF based SECF and AEPC.	



- Have provided all the information about support/subsidy received from other development Partners/Organisation including Government Entity/Local Government/Province Government
- Not backlisted by any Government agencies

Name & Designation: *

Date: *

Note: Field with (*) mark are mandatory field.

Documents to be submitted at the full application stage

Financial Model

1.	Copy of registration certificate with the relevant authorities
2.	Consortium declaration if relevant
3.	Financial statements (up to 3 years maximum)
4.	Previous audit reports (up to 3 years maximum)