

SUBMITTING A REQUEST

Green A&E invites its customers to share their requirements together with specific technical and non-technical fact data. Please make sure your request is accurate and reflects all basic details and minimum requirements. The more information shared, the better and faster the response. Inaccurate input may lead to delay, disappointment and unnecessary project costs.

To submit a request, please return the SMART MICROGRID REQUEST FORM accompanied with any additional information in an email to request@greenae.org

Based on customer's input Green A&E engineers run a prefeasibility analysis and produce a GOST (GREEN A&E Optimal System Type) followed by conceptual design and matching quotation. After agreement and customer purchase order, delivering, implementing, monitoring and maintaining the system are the most logical next steps. To enable Green A&E producing a GOST the following basic fact information is indispensable and must be provided by the customer:

1. Detailed information about exact location of implementation including clear pictures if possible;
2. As much as possible fact information about the application or overall project;
3. Electrical load profile/power consumptions characteristics of the application / project;
4. Exact purpose/expectations. What is the envisioned function of the GREEN A&E solution;
5. Information/conformation regarding potential solutions;
6. Detailed information about existing generator if applicable for the location/project;
7. Detailed customer/point of contact information;

Green A&E can use approximate data but prefers highly detailed data when available. The latter is very important for the final result. Professional assistance in defining project requirements and determining fact input data is possible at any time but at a small symbolic fee which will be reimbursed after signing-up a follow-up agreement with Green A&E.

For further assistance please contact Green A&E directly by email or by dialing one of the following telephone numbers:

Tanzania: +255 783162728

Dubai: +971 508548247

Netherlands: +31 6 24 209 111

Email: request@greenae.org

In Green A&E we speak Swahili, English, Hindi, German, Dutch and Russian

REQUESTER CONTACT DETAILS:	Date of request (mm/dd/yy):
Company: _____	
Name: _____	
City: _____	Country: _____
Telephone: _____	Cell: _____
Email: _____	

1 - EXACT LOCATION – BASIC FACTS:

Country: _____ (Nearest) Town: _____

Longitude: _____ Latitude: _____ Altitude [m]: _____

Location: In town Just outside town Remote Very remote

If remote, distance to the nearest town with basic facilities[km]: _____

Location: Is safe Is somewhat safe Is unsafe Is very unsafe

Location is: Public domain Private property

Location is: Protected area Unprotected area

The risk of equipment theft is: Low Medium High

Assigned location is located in or near (more answers a possible):

Forest Open field Mountains Seaside river

Other: _____

Please provide clear photographs of the assigned location. Pay attention to possible shadow spots and objects (e.g. trees) that possibly may affect the efficiency of small wind turbines and solar panels.

Commercial electrical grid connection at assigned location: No Yes

If NO: How many meters (or km) the assigned location is away from the nearest public electrical grid access point: _____

If YES: Cost per kWh [US\$]: _____ Fixed costs per month [US\$]: _____

Grid connection is reliable (up time at least 95%): Yes No

If NO, average downtime: _____ hrs/day

Reliable cell phone (GSM) coverage at assigned location: Yes No

Stable Internet access (no dial-up) at assigned location: Yes No

If NO, is Internet access at location desired: Yes No

2 - PROJECT DESCRIPTION:

*Please provide a short description of the application that requires the GREEN Solution.
Please understand that PV-battery system costs decrease with unmet load allowance.*

The Application is a "stand alone", one node object: Yes No
 The Application is mission critical and downtime cannot be tolerated: Yes No
 If NO, how many hours of down time/day is still acceptable: _____ Hours
 And preferable when: Early morning Early evening Day time Night time

Please give a brief description of the application / project:

Expected service activation date: _____ Comments: _____

Expected / projected life time (or contract term) of this project [yrs]: _____

Any budget constrains: No Yes

If YES, budget target: TBD CAPEX [US\$] _____ OPEX [US\$/yr] _____

3 - ELECTRICAL LOAD PROFILE:

Please define the load power consumption characteristics. Please be as accurate as possible but leave open if the answers are unknown.

Load Type: AC 110V 220V Other [V]: _____
 AC rated current [A]: _____ AC max current [A]: _____
 DC 12V 24V Other [V]: _____
 DC rated current [A]: _____ DC max current [A]: _____

If the load is specified for AC, can it be modified for DC operation: No Yes

If YES, preferred DC Voltage: 12V 24V 48V TBD

Average day time power consumption [kWh]: _____ Day time peak power [kWp]: _____

Average night time power consumption [kWh]: _____ Night time peak power [kWp]: _____

Please note: GREEN A&E replicates this profile throughout the year unless a different load profile for different month or day types has been defined, preferable in a separate standard GREEN Load Profile Spreadsheet. Please apply for an example load profile sheet if required.

The defined load profile is constant throughout the year: Yes No

If NO, will you submit an extensive detailed load profile definition: Yes No

4 - EXACT PURPOSE / EXPECTATIONS:

Please define the envisioned function of the GREEN SMART MICROGRID Solution.

The GREEN A&E Solution will function as secondary power supply and/or back-up for electrical grid or genset outages: Yes No N/A

The GREEN A&E Solution will function as prime power supply with genset as back-up power supply: Yes No N/A

The GREEN A&E Solution will function as prime power supply with batteries (or alternative storage) as back-up power supply: Yes No N/A

The GREEN A&E Solution will function as prime power supply with batteries as first back-up and a genset as secondary back-up: Yes No N/A

If the envisioned situation is believed more complicated and therefore requires more explanation, please provide more detail below:

5 - POTENTIAL SOLUTIONS:

Finding the best solutions requires customer vision and input.

Can assigned location physically host solar panels: Don't know / not sure Yes No

If yes, how: Building integrated (roof) Free standing Pole mounted TBD

How many panels can be placed (estimation): Less than 10 As needed _____

A solar panel can have many different sizes but for calculation purposes please consider 1m60 x 0.90m

Could a small wind turbine be one of the solutions: Don't know / not sure Yes No

Do you have access to large amounts of biomass: Don't know / not sure Yes No

Any suggestions:

6 - EXISTING GENERATOR AT LOCATION (IF APPLICABLE):

Please provide as much information as possible, if possible. Alternatively submit the generator datasheet so GREEN A&E can extract the required critical information.

At location, is there an existing generator (genset) in use: No Yes

If YES please continue this section 6 of this form.

Make: _____ Model/Type: _____ Year built: _____

Generator Control: Droop Isochron Don't know

Fuel: Diesel Gasoline (natural) gas Other: _____

Fuel tank size [liter]: _____ Cont. operating hrs on one tank [hrs]: _____

Local fuel price [US\$/liter]: _____

Total (incl. transport) fuel cost [US\$/liter] at your location: _____

Estimated operation & maintenance cost (ex fuel) [US\$]: _____ Month Year

Generator replacement costs [US\$]: _____

Generator operational status: Permanent Operation As back-up power supply only

Estimated number of operational hours / day: Weekdays: _____ Weekend: _____

DC Output [V]: _____ DC rated output [W]: _____ DC max power [Wp]: _____

AC Output [V]: _____ AC rated output [W]: _____ AC max power [Wp]: _____

AC rated current [A]: _____

Please complete this questionnaire as accurate as possible. The first system design strongly depends on the given input data. Equally important is information about the existing generator system and its electric power supply. If available please add to this form the generator load profile including any additional site information, drawings and photographs

Please submit this form on line or send your copy in an email to request@greenae.org

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