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PROJECT TECHNOLOGY ASSESSMENT AND MANAGEMENT ROLE

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Section 1. Introduction

TECs are looking for someone to join our team of professionals from a range of business and community sectors.

We have a mix of people, some giving their time for free and others contracted by TECs to deliver specific services. We believe that Community Energy (CE) is an excellent vehicle for our efforts and personal energy to mitigate against the affect of Climate Change, benefit our local economy and community.

TECs is one of a number of CE co-operatives in the South West (SW), we have installed 110kWp rooftop PV at two schools. TECs is also evaluating other renewable technologies and more extensive PV projects longer term.

There are several organisations active in the Community Energy sector in the SW, offering opportunities for local business to provide a range of services. TECs recognises that it cannot rely on its volunteers to carry out its business operations longer term. Our operations budget therefore allows for such services to be outsourced to achieve new revenue streams.

Section 2. The Benefits to you and your organisation

You will be involved in a worthwhile community venture. You can offer your expertise to benefit your local community. Your chance to give something back in your local area.

Involvement in CE could be good for your professional development and would certainly look good on your cv.

Interesting challenge to work with people from different sectors with different mindsets and experience. An opportunity to broaden your horizons.

And of course the potential spin-offs for you and your organisation in terms of possible contracts from TECs and other CE groups, at the very least it would increase your profile locally.

Section 3. Scope of the Role

TECs has well established several financial and operational documents, templates and processes. We have been using these for our first two project.

The role requires expertise in the areas listed below. It covers both the initial project-based technology assessment, issuing an invitation to tender, liaising with preferred installers and building/asset managers as well as project managing the installation and delivery of the project.

The role may include improving on existing templates and processes with opportunities to learn, innovate and broaden responsibilities in these and related areas.

By joining the team as a member of the Support Forum or as a co-opted Director, you will be working with other volunteers and the Board. You would be reporting on progress to the TECs Board.

TECs is focusing on rooftop solar PV as its preferred renewable technology. A good understanding of this and other renewable technologies such as biomass heat as well as energy saving technologies such as lighting and insulation, will be necessary.

Section 4. Project Technology Assessment & Management Areas

The two main areas of responsibility will require you to have:

- ability and willingness to learn new skills;
- organisational, project management and communication skills;
- ability to be a cooperative team player;
- appropriate renewable and energy saving technology experience;
- self motivation and flexibility, ability to deliver on commitments.

You would be expected to work independently and flexibly, but have access to all the processes and prior experience TECs has documented.

You do have to have some prior experience in both of the areas of responsibility, but you do not have to be an established expert as you would be trained in how to do these.

You will also be given the flexibility to define the role as you gain experience and, if appropriate, extend this to other areas of the business.

4.1 Project Technology Assessment

TECs carries out two levels of technology assessment. The first is part of its Initial Assessment of the Stakeholder's proposed projects and the Stakeholder organisation itself (please refer to this process defined in a separate document). The second is a full technology assessment, normally carried out by TECs' preferred installers, so your role will include close liaison with them including the preparation of a competitive Invitation to Tender (**ITT**) where necessary.

The following is a list (and process) for each of these assessments, they will vary depending on the technology involved:

Initial Assessment (solar PV):

- Site visit for an initial feasibility check to cover (refer to Initial Assessment checklist):
  1. Orientation and shading analysis
  2. Access checks
  3. Roof structural appraisal (visual)
  4. Grid connection enquiry with Western Power Distribution (WPD) including type and suitability of supply meter and cabling
  5. Planning scoping, is planning required/likely to be granted
  6. Appraisal of expected energy use on site, total and time of day/month power, based on utility bills and 1/2 hourly meter reading if available or actual measurement
  7. Economic appraisal to include estimate of system life time costs, annual energy generation and income from sale of electricity
  8. Appraisal of energy storage and private wire potential and grid export limitation options/restrictions

Full Assessment with/by Installer (Solar PV):

- Invite preferred installer to carry out an assessment leading to budgetary quotations
- Based on installer/service provider budgetary costs/income, produce Financial Model for the project and present to TECs Board for approval
- Once project is has agreement to progress from the TECs Board:

1. pre-register with Ofgem if appropriate

2. Apply for grid connection to WPD
3. Prepare FiT and Export registration with TECs' chosen utility

- Create and issue Invitation to Tender (ITT) document for Installers (Based on TECs template), this should include the following:
  1. equipment standards and installer criteria
  2. insurance backed warranties for equipment and workmanship
  3. comply with MCS Guidelines as stated in MIS3002 if appropriate
  4. requirement for ongoing maintenance and provision of remote monitoring system
  5. requirement for remote generation and export meter readings (smart meters)
  6. relevant Health & Safety standards
  7. tenderer selection criteria used by TECs
- Tender to be agreed by Board before distribution to preferred installers
- Liaise with Installers during tender process
- Collect tender responses, assess and present to the TECs board for approval
- FIT Pre-registration and status verification with Ofgem if appropriate

4.2 Project Management

After TECs Board approval to proceed with the project:

- Inform and establish project plan with selected installer site owner/manager and the TECs Board
- Register for FiT & Export with TECs chosen utility
- Organise for appropriate internet access at site, for remote monitoring of equipment/meters
- Monitor and liaise with Installer/Service providers throughout the project
- Report progress to TECs Board, with appropriate frequency to allow issues to be resolved in a timely manner

Section 5. Hours & Pay

TECs has set aside funds to pay for this service, but recognises that at this stage the role may be a mix of paid/voluntary work. The terms for this are negotiable.

Each project will inevitably be unique, indeed some projects may not progress beyond the Initial Assessment stage. The exact scope of your role and deliverables will therefore be agreed on a project by project basis. An hourly rate will also be agreed in advance.

Based on our experience to date, a 'typical' ~50kWp rooftop solar PV project would require:

- Initial Assessment > 10-20 hrs over a 1-2 week period
- Full Assessment with installer > 15-25 hrs over a 3-4 week period
- Project Management > 15-30 hrs over a 4-8 weeks period

These activities may overlap and projects may take 3-6 months from initial assessment to installation/handover.