

ENERGY SYSTEMS TOOLKIT

Partnerships and Collaboration Module



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Energy & Environment



Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

BACKGROUND

The Energy Systems Toolkit (the 'Toolkit') is aimed at organisations, community groups or businesses, at different stages in the project development process, whether exploring ideas to develop into a project or additional options to include in a current project. The Toolkit aims to provide further information to organisations on energy systems topics that will help determining whether a project idea is viable or highlight alternative options that should be considered. The Toolkit also provides support through the development process to construction, highlighting any support available to them. This could include:

- Signposting businesses or communities to additional support (technical or financial) in developing their project, to potential project partners or to potential sources of funding;
- Provide detail on key considerations and barriers across different technology projects; or
- Highlight different technology projects and themes that have been developed successfully across Scotland.

For each of the topics, the guidance provided will be informative and will indicate the actions to be taken and the next steps the organisations should take to progress.

The Toolkit links to other relevant guidance documents, such as the [CARES Toolkit](#)¹, which can be used in parallel.

INTRODUCTION TO PARTNERSHIPS AND COLLABORATION

The Scottish Government and Highlands and Islands Enterprise wishes to see communities, businesses, innovators and commercial developers working together on energy systems projects. These collaborations can benefit from working with external sources of funding, unique working partnerships and technical specialists to deliver local energy projects.

This Partnership and Collaboration guidance document aims to help organisations understand how partnership and collaboration could benefit them. It highlights the key areas that need to be considered when entering a partnership or collaboration and signposts for potential ways for identifying partners.

It is aimed at organisations who are in the development stage and are either considering their funding options or are actively seeking collaborators and support for their project. The module will include input from Scottish Development International.

WHY COLLABORATE?

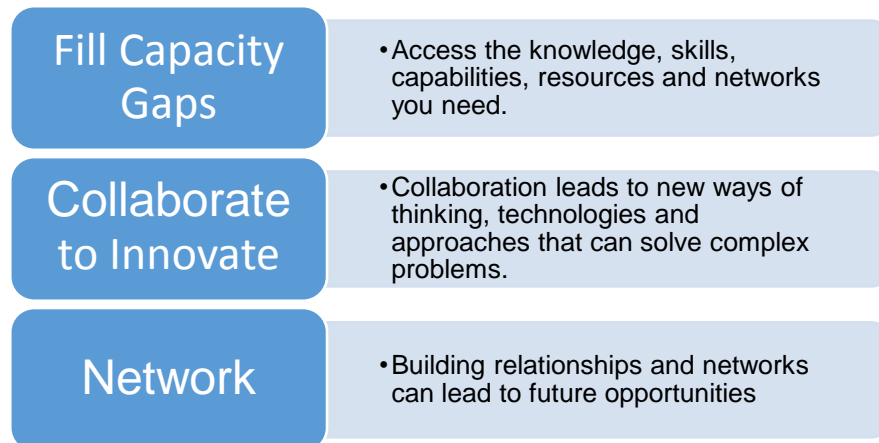
Identifying, developing and implementing a project successfully requires a mix of knowledge, skills, capabilities, resources and networks. You may need to identify and fill your organisations capacity gaps – if possible in a way that minimises risk taken on by your organisation. Collaboration can also create opportunities which can help you achieve your organisations objectives and goals.

One option is to set up a community group: the **CARES tool kit module**. "Establishing a Community Group" includes guidance and reference documents on how to establish a community group, including the legal framework, financial considerations and how the group is involved during the operation phase of the project.

Figure 1 shows the benefits of successful collaboration.

¹ <http://www.localenergyscotland.org/funding-resources/resources-advice/cares-toolkit/project-development/establishing-a-community-group/>

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Fill capacity gaps – achieve organisation goals and objectives effectively and efficiently

Filling your organisation's capacity gaps will help you to achieve your objectives and goals. There are two basic approaches you can take: build capacity internally (e.g. upskill members, hire new staff with specific skill sets.) and/ or build capacity through collaboration with external individuals, organisations and institutions.

The best approach will largely depend on the depth of identified capacity gap(s) and the impact that these gaps are likely to have on achieving your goals and objectives in the short term (e.g. related to a single project) and the long term (e.g. your organisations overall direction).

For example, your organisation may lack the technical expertise needed to design a solar PV system. If your organisation intends to carry out only 1 solar PV installation, it may be most appropriate to outsource the solar PV system design. However, if you intend to carry out multiple solar PV installations, it may be worth training existing members or recruiting someone with the desired skill set.

Collaborate to innovate – and develop new ways of achieving your goals and objectives

Collaboration - bringing together complementary knowledge, skills and capabilities – can lead to new and innovative ways of overcoming problems, improving on old habits and ideas, and uncovering opportunities that may have not been realised on you own.

For example, collaboration could lead to innovative approaches to project finance, identifying or development new technology (e.g. project management software or an energy efficiency device).

A collaborative approach can also lead to the improvement of overall productivity and project resilience through drawing on a larger knowledge pool and through the criticism of peers with new perspectives.

Build relationships and networks – discover new opportunities

Developing your networks can have many benefits. New contacts may have experience of addressing the same issues you have and can have useful insights. There is nothing like understanding how someone has succeeded in a similar project and overcome challenges to help you make progress. New partners may bring access to new technologies, knowledge of sources of funding, or funding opportunities. You may be able to gain invaluable experience of new suppliers - both those you may wish to engage with, or any you may wish to avoid.

DEVELOPING PARTNERSHIPS

The success of a partnership or collaboration largely depends on your ability to identify a partner that complements your organisation. Ideally, successful collaboration should enable those involved to achieve their objectives and goals more effectively than they would have done alone. This is the Principle of Partnership. When formulating partnership responsibilities, it is important to make sure that the benefits are clear to all and are measurable.

Step 1: It is possible to have capacity gaps in knowledge, skills, capabilities, resources and networks (see **Error! Reference source not found.**). Map the capacity of your organisation against its objectives and goals and determine capacity gaps (see example in Figure 2). You may wish to map capacity gaps for both the project being considered (e.g. 1 solar PV installation), and for a portfolio of projects (e.g. numerous energy projects across a region) to identify whether capacity gaps are reoccurring or only apply to one project.

Figure 1 Elements of organisational capacity

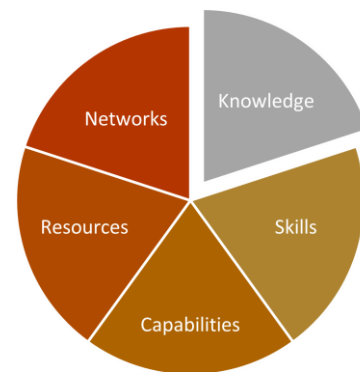


Figure 2 Capability Matrix Mapping Example

STEP	ACTIVITY	PROJECT MANAGEMENT	FINANCIAL CONTROL	LEGAL ISSUES	TECHNICAL DELIVERY
1	Develop the vision	X			
2	Seek Advice	X			
3	Communicate	X	X		
4	Find a Site	X	X		X / X
5	Initial Scoping	X	X		X / X
6	Establish an Entity	X	X	X	
7	Secure Initial Funds	X			
8	Pre-feasibility Study	X			X
9	Financial Viability Check	X			X / X
10	Secure the Site	X	X	X	
11	Full Feasibility Study	X	X		X
12	Confirm Grid Availability	X			
13	Pre-Planning Consultation	X	X		X
14	Neighbour Notification	X	x		X
15	Fix the Project Size	X	X	X	X / X
16	Financial Viability Check	X			
17	Secure Pre-planning Funds	X			
18	Planning Application	X	X	X	X / X
19	Water Abstraction Licence Application	X	X	X	X
20	Grid Application	X	X	X	X
21	Identify Funding Sources	X	X	X	
22	Develop Full Financial Model	X	X / X		X / X
23	Identify and Contact Suppliers	X	X	X	
24	Secure Bridge Funds	X	X / X	X	
25	FIT Pre-accreditation	X	X	X	
26	Financial Close	X	X / X	X	
27	Repay Other Funds	X	X	X	
28	Construction	X / X	X	X	X
29	Community Benefit	X	X	X	
30	Operation	X	X	X	X
31	Decommissioning	X	X	X	

X	Potentially available within community group
X	Likely to be contracted out

Step 2: Determine what type of partners or collaboration could best fill any capacity gaps. Keep in mind the Principle of Partnership when considering the cost versus benefit of a potential partnership or collaboration.

Potential partners are highlighted below.

Investors (relevant gap – resources)

Access to sufficient capital is essential for the success of any project. Your project(s) capacity gap may illustrate a need for resource in the form of equity.

Potential investors could include:

- Private equity firms
- Private institutions
- Public institutions
- Community interest groups
- Crowd funders
- Charitable trusts
- Community shares

Each investor has their own set of criteria that need to be considered against your needs and limitations.

Consultants and experts (gap – knowledge, skills, capabilities, networks)

Your project capacity gap may illustrate a lack of knowledge, skills, capabilities and/or networks needed to achieve your project goals and objectives. You may wish to contract out certain activities or responsibilities to external experts. Activities could include preparing and submitting a planning application or carrying out a full feasibility study. Responsibilities could include project management or legal advisor.

You will need to understand which activities and responsibilities must be carried out externally and which could be carried out externally. In order to identify areas where external expertise is a must, you may wish to create a cost benefit analysis against each activity and responsibility which you are considering outsourcing. Refer to “Step 1” above.

Key Considerations - Investors

Investor criteria and offering may vary significantly. You will need to understand how this aligns with your needs and limitations:

- Types of projects or technologies that the investor is interested in
- Type of equity available
- Loan or grant
- Interest rates
- Repayment terms (including duration of loan)
- Any associated fees

Key considerations - Consultants

Consultants or experts contracted should be able to add value in a way that your organisation would be incapable of given the same time or resource. Opportunity cost should be considered i.e. what will you have to forgo if you choose carrying out work internally instead of outsourcing?

Technology developers (gap – skills and capabilities)

Your project capacity gap may illustrate a lack of understanding of the opportunities and barriers associated with potential technologies. Dialogue with technology developers may help your organisation explore niche technologies or a combination of technologies that could assist in overcoming project barriers (e.g. improve functionality of systems, increase financial returns, solve technological problems, etc.) and present new opportunities for technology development and integration.

Academics (gap – knowledge, skills and capabilities, resources)

Your project capacity gap may illustrate a need for expert analysis or research which a research institute could supply, depending on their area of expertise, interest and budget. This could include, for example, analysis of the non-market impacts (e.g. social or environmental) of technologies on a community group or region. Other examples of collaboration with academics could be the testing of a new technology (in research stage) or collaboration to develop a new technology or system.

Business Partner (gap – knowledge, skills, capabilities and resources)

Your project capacity gap may illustrate a need for recruiting a business partner. Business partnerships can be specific to a particular project, an element of a project, or numerous projects based on formal or informal terms. Ultimately, a business partnership is formed where terms for mutual benefit can be found – looking for opportunity for win-win situations. These benefits do not always have to be monetary and can include the sharing of knowledge, skills, capabilities, networks and time.

Key considerations – Technology Developers

- Adoption of piloted technologies may increase project risk.
- Technology developers looking to showcase (and test) their technologies may be willing to do so at reduced prices.

Key considerations – Academics

- May increase project time scales.
- Could lead to non-monetary value.
- May develop Intellectual Property

Key considerations – Business Partners

- Terms of business partnerships should be carefully considered and documented where possible.
- Benefits to each partner should be understood.

TYPICAL PARTNERSHIP ARRANGEMENTS

Partnerships can take on a variety of forms as described in the subsections below. The arrangement you use (e.g. memorandum of understanding) should follow the Principles of Partnership – enable the achievement of your objectives and goals more effectively where benefits are clear and measurable. Links providing further information on types of partnership arrangements are listed in the Further Information section under “Partnership Arrangements”.

Memorandum of Understanding (MOU)

A memorandum of understanding (MOU) is a formal agreement between two or more parties. MOUs are typically used to clearly identify the objectives, roles and responsibilities of each party

involved in the partnership. MOUs are not always legally binding but they carry a degree of seriousness, commitment and mutual respect, stronger than a gentlemen's agreement. MOUs can be used to establish official partnerships. Note that the definition of MOU is essentially the same as the definition for Heads of Terms and Letter of Intent. Heads of Terms set out the basis of the agreed arrangement in broad terms and precede signing of a contract. However, the circumstances under which definitions are used may vary.

Partnerships

A partnership arises whenever two or more people co-own a business and share in the profits and losses of the business. In a partnership, each person contributes something to the business – such as ideas, capital, property, or some combination of these. Management rights, profit share, and personal liability will vary depending on which of the three modern partnership forms the business takes: general partnership, limited partnership, or limited liability partnership (LLP). FindLaw (see link in Appendix) provides further detail on types of partnerships (e.g. general partnerships, limited partnerships and limited liability partnerships) as well as tips on legal and tax issues.

Collaborative agreements (relevance: Academics, Technology developers)

Collaborative partnerships are agreements and actions made by consenting organisations to share resources to accomplish a mutual goal. Collaborative partnerships rely on participation by at least two parties who agree to share resources, such as finances, knowledge, and people. Organisations in a collaborative partnership share common goals with each partner bringing specialist skills and resources to the partnership. The essence of collaborative partnership is for all parties to mutually benefit from working together.

Collaborative agreements cover:

- Intent of the parties to share data, research and development materials and facilities.
- Arrangements for the management and co-ordination of the project
- Responsibilities (including funding) and liabilities of the partners
- IP arrangements
- Reporting and publication arrangements, access to results and confidentiality provisions
- Consequences of termination/default and ways of handling disputes

The “Intellectual Property Office” provides model arrangements and related guidance documents (see Appendix).

Shared Ownership (Joint Venture)

A joint venture is a business entity created by two or more parties, and is generally characterised by shared ownership. In joint ventures, the entities involved typically start and invest in a new company that's jointly owned by both of the parent entities. Because the joint venture can access assets, knowledge and funds from both of its partners it can combine the best features of those entities without altering the parent entities. The new company is an ongoing entity that will be in business for itself, but profits are owned by the parents. Further detail on Joint Ventures can be found on the NI Business Info website (see link in Appendix).

Special Purpose Vehicles (SPVs)

An SPV is a legal entity, usually a limited company or a limited partnership which has been set up to address specific (often temporary) objectives. One common aim in setting up a SPV is to isolate the firm from financial risk. One example is when an organisation uses the SPV to finance a large project without putting the whole organisation at risk.

HOW TO FIND PARTNERS: USEFUL ORGANISATIONS

There are numerous organisations, listed below, who can help you find partners and who also can help you develop partnerships and opportunities to collaborate.

Typically, a potential partner will want to know some basic information about the relevance and suitability of your proposed partnership. This should include details specific to the partnership including:

- Scope
- Timescale
- Cost
- Expected outcomes

Links to each organisation discussed in the subsections below are provided in the Appendix.

Highlands and Islands Enterprise (HIE)

Highlands and Islands Enterprise (HIE) is an ambitious organisation with a unique remit that integrates economic and community development. HIE works in a diverse region which extends from Shetland to Argyll, and from the Outer Hebrides to Moray, covering more than half of Scotland's land mass.

As a Scottish Government agency, HIE's role is to lead regional growth and development in line with Scotland's Economic Strategy (SES), improving competitiveness and helping build a fairer society.

HIE's key priorities are, each with a focus on the 4 'Is' – Innovation; Inclusive Growth; Internationalisation and Investment:

- Supporting businesses and social enterprises to shape and realise their growth aspirations (with a focus on Innovation)
- Strengthen communities and fragile areas – (with a focus on Inclusive Growth)
- Developing growth sectors, particularly distinctive regional opportunities – (with a focus on Internationalisation)
- Creating the conditions for a competitive and low-carbon region – (with a focus on Investment)

In terms of HIE's support for Community Energy, HIE have been involved in leading and supporting the growth of the community energy sector in Scotland since 2002, with the region being recognised as a leader in community energy innovation. Many communities are trailblazing innovative development, leading their communities through a transition to a strong, low carbon economy.

HIE will work in partnership with others to ensure the support and conditions are correct for communities across the area to provide a clear route for the development of their community energy project. Some of HIE's key partners include the Scottish Government, Scottish Investment Bank (REIF), Local Energy Scotland (LES) and Community Energy Scotland. HIE is an organisation whose purpose is to generate sustainable economic growth across the Highlands and Islands – this includes supporting businesses and social enterprises to shape and realise their growth aspirations.

Scottish Enterprise

Scottish Enterprise is an economic development agency and a non-departmental public body of the Scottish Government whose focus includes:

- Internationalisation: Encouraging international trade and investment
- Innovation: Inspiring Scottish business growth through investing in new products and processes
- Investment: Helping secure investment to allow companies and sectors to expand internationally

Innovate UK

Innovate UK is the UK's innovation agency. Innovate UK works with companies to de-risk, enable and support innovation through funding, connecting innovators and supporting companies to launch, build and grow successful business.

Events and Conferences

Attending events and conferences is a great way to stay connected to the ever changing political, technological, economic and social landscape of the energy system sector. Events and conferences tend to bring together individuals (either representing themselves or organisations) from across sector that may benefit your organisation and/or business in multiply ways. Events and conferences are an opportunity to network, building relationships, understand new technologies/systems/ideas and potentially find new clients – your approach will very much depend on your strategic objectives.

It is useful to know what the focus of an event will be, and the types of people/companies that will be attending, so that you can prepare accordingly, and make a judgment call regarding whether it is worth your time to attend. For example, an events focus may be technology specific (e.g. solar PV systems), or related on business knowledge sharing (e.g. event put on by a renewable energy association), or could be on a new policy reform (e.g. feed in tariffs or ESOS compliance).

Some examples of conferences include (see links in Further Information at the end of the document):

- CARES conference
- All Energy
- LCITP events

Some examples of sector specific conferences (see links in Further Information):

- Scottish Hydrogen and Fuel Cell Association;
- Renewable UK conferences/events;
- UK Energy Storage Conference;
- Edie Energy Management conference;
- SHREC (Scottish Highlands Renewable Energy Conference);
- DTAS Conference (Development Trust Association of Scotland);
- the various Scottish Renewables conferences;
- Offshore Wind & Supply Chain;
- Various Marine Energy conferences;
- Low Carbon Cities conference;
- UK Energy Storage Research Conference;

- British Wind Energy Associate Annual Conference;
- British Hydropower Association Annual Conference
- Smart Solar UK and ROI Conference.

Educational or research institutions

You may engage with academics or researchers looking to gather data, test theories, further develop technologies or carry out industry testing. The channel of engagement could include calling/emailing the potential institute to discuss your interests and determine how these could be best directed (or lined up) with a faculty within the institute. Alternatively, some institutions may have platforms/gateways that present opportunities for business collaboration.

Interface is a Scottish organisation that helps organisations work with Scotland's universities and research institutions to find a match to partnership needs around innovation challenges. It facilitates collaborative partnerships between all industry sectors, including charity, social enterprise and third sectors, helping businesses work together on key industry challenges. Some universities that may be worth exploring include:

- Edinburgh
- Strathclyde
- Glasgow Caledonian University
- University of Edinburgh
- Glasgow School of Art (Mackintosh Environmental Architecture Research Unit)
- Heriot Watt
- University of the Highlands and Island

There will be other universities that have specific expertise that may suit your project and a review of other research institutes may be required.

On-line platforms, associations and business gateways etc.

On-line platforms, associations and other gateways may support you in seeking and communicating with potential partners. These could include:

- Platforms e.g. for sharing ideas, collaboration, linking up with other companies.
- Associations , e.g. Scottish Energy Association, Scottish Renewables and Renewable UK
- Linked- in and other social platforms

ISSUES TO MANAGE AND RISKS WHEN COLLABORATING

There are a number of key issues that should be considered when exploring options for partnership and collaboration.

Intellectual Property

Intellectual property refers to something created which has value and which may need to be protected. There is no one-size-fits-all approach to intellectual property ownership and exploitation and the concerns and goals of the parties in each situation are often unique. The most contentious aspects of research, development and commercialisation agreements often relate to intellectual property ownership and exploitation. Intellectual Property can be broadly categorised into Background Intellectual Property (BIP) and New Intellectual Property (NIP).

BIP is pre-existing intellectual property. It is often necessary for one party to grant to the other a licence under BIP to enable the other party to conduct the research and development work. If both parties are doing research and development work, cross licences may be necessary. It is useful to consider how valuable and sensitive the BIP is and whether there should be any specific restrictions relating to its use or disclosure.

NIP is the intellectual property which arises out of the research and development work and is also referred to as Foreground Intellectual Property. The legal default position – if there are no provisions in the agreement dealing with intellectual property – is that a party will individually own the FIP that it solely creates, and the parties will jointly own the FIP that it jointly created. This co-ownership of intellectual property should be avoided in a collaboration context unless the consequences of the co-ownership have been carefully considered and an agreed position documented. There are a wide variety of creative approaches to intellectual property ownership and use, and it is useful to take the time to explore these before entering into a partnership.

Confidentiality and Publication

It is important to ensure that the confidentiality, relating to your partnerships, correspond to the intellectual property provisions. A common oversight is for the parties to negotiate the intellectual property provisions but assume that the confidentiality provisions are “standard” and fail to amend them accordingly. A **Non-Disclosure Agreement** can be used to address this. Your agreement on confidentiality and publication should include details on rights to publish the outputs of collaboration and any conditions that may apply.

Sub-contracting

If one of the parties does not have the expertise to do all of the work that they are obliged to do under the contract, they may wish to sub-contract. It is useful to consider whether the parties are happy for their Background Intellectual Property to be disclosed to, and used by, sub-contractors.

Competition Law

A research, development and collaboration agreement is a "horizontal agreement" within the scope of European and UK competition law. Care should be taken to ensure that these agreements are drafted to comply with this legislation.

Benefits foregone

Partnerships can result in benefits foregone – where there would have been more overall benefit if carrying out an activity internally and not joining in a partnerships or collaboration agreement.

There are numerous factors that could contribute to benefits foregone:

- Incompetence of partner or collaborator
- Services are poor value
- Partnerships or collaborator didn't correctly align with your needs
- Additional complexity of managing partnerships resulted in unachieved KPIs.

Ideally, efforts should be made to identify factors that may lead to benefits foregone and take appropriate action to avoid or mitigate.

Further Information

More information can be obtained at:

https://united-kingdom.taylorwessing.com/synapse/commercial_rdcagreements.html

FURTHER INFORMATION

Partnership arrangements:

Citizens Advice Bureau. “Partnership: introduction to collaborative working”. Provides advice and links discussing reasons for working with other organisations. <http://asauk.org.uk/wp-content/uploads/2013/09/Partnerships-introduction-to-collaborative-working.pdf>

FindLaw. Provides definitions of different types of partnerships, tips on legal and tax issues related to partnerships, checklists for starting a partnerships and other useful facts. <http://smallbusiness.findlaw.com/incorporation-and-legal-structures/partnerships.html>

Intellectual Property Office. “Lambert Toolkit”. The Lambert toolkit is for universities and companies that wish to undertake collaborative research projects with each other. <https://www.gov.uk/guidance/lambert-toolkit>

Shared Ownership. Local Energy Scotland aims to help support Shared Ownership projects by giving support to both community groups and renewable energy developers. <http://www.localenergyscotland.org/shared-ownership/>

NI Business Info. Further detail on Joint Ventures including checklists and templates. <https://www.nibusinessinfo.co.uk/content/types-joint-venture>

Seeking partnerships / links:

Highlands and Islands Enterprise. <http://www.hie.co.uk/about-hie/our-priorities/supporting-businesses-and-social-enterprises/supporting-businesses.html>

Scottish Enterprise. <http://www.scottish-enterprise.com/about-us/what-we-do>

Innovate UK. <https://www.gov.uk/government/organisations/innovate-uk/about>

Interface <http://www.interface-online.org.uk/how-we-can-help>

Conferences:

CARES conference. <http://www.localenergyscotland.org/conference>

All Energy conference. <http://www.all-energy.co.uk/Whats-On/Conference/>

Scottish Hydrogen and Fuel Cell Association Annual Conference. <http://www.shfca.org.uk/shfca-annual-conference/>

Renewable UK conferences. <http://events.renewableuk.com/>

UK Energy Storage Conference. <http://energysuperstore.org/esrn/ukes2016/>

Edie Energy Management conference. <http://events.edie.net/energy/>

DTAS Conference (Development Trust Association of Scotland); <http://www.dtascot.org.uk/conference>

Scottish Renewables Conferences: <https://www.scottishrenewables.com/events/>

British Hydropower Association Annual Conference <http://www.british-hydro.org/events/>

Smart Solar UK & ROI Conference. <http://www.solar-uk-conference.co.uk/>

Organisations:

LCITP. <http://www.gov.scot/Topics/Business-Industry/Energy/Action/lowcarbon/LCITP/TransformDemonstrate>

Scottish Energy Association. <http://www.wearesea.com/>

Scottish Renewables. <https://www.scottishrenewables.com/>

Renewable UK. <http://www.renewableuk.com/>

Innovate UK. https://connect.innovateuk.org/knowledge-transfer-networks?_ga=1.266631182.189061498.1471423670

Scottish Hydrogen and Fuel Cell Association <http://www.shfca.org.uk/>

Risks of Collaboration:

https://united-kingdom.taylorwessing.com/synapse/commercial_rdcagreements.html

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