**Smart Specialisation Business Higher Level Skills (SS-HLS)**

**The Care Study of Build Solar**

1. **Introduction.**

The Smart Specialisation Higher Level Skills (SS-HLS) project is focused on developing the skills that businesses need to identify new talents and potentially generate innovative ideas. The project's goal is to work with several small and medium-sized enterprises (SMEs) in Cornwall and the Isles of Scilly (CIoS) to comprehend their skills issues, recognize their training needs, and provide the necessary support to enhance their skills and competencies.

The SS-HLS project is partially funded by the European Social Fund and is implemented in partnership with the University of Exeter, Truro & Penwith College, the University of Plymouth, and Falmouth University. The case study adopted an employer-led approach to support, similar to Build Solar's approach to workforce development and upskilling. It also suggests areas for improvement, including short courses and apprenticeships that would attract and develop staff members.

The primary objective of this case study is to provide the context of the skills issues, shortages, and recruitment difficulties that affect Build Solar and how the project supports the company in addressing them.

1. **About Build Solar**

Build Solar is supported by cutting-edge research, carried out at the University of Exeter. It brings together the latest solar technology and embeds it within conventional construction materials. This combination provides access to new markets and creates opportunities to deploy solar technologies within urban environments. Following many years of research into integrated solar technologies, a small team from the University of Exeter decided to create a spin-out company to develop some of their innovative ideas.

Deployment of standard solar technology is limited by the large area requirement and the negative visual impact. Build Solar wants to overcome these limitations by introducing technologies that become a part of the building's envelope. Their aim is to ***build*** integrated, affordable, efficient, and attractive ***solar*** technologies as part of the building's architecture, in places where energy demand is highest, whilst having minimal impact on the landscape and on quality of life.

# **Background**

Businesses in Cornwall have some of the highest skills gaps in the South West of England, particularly in engineering, information technology, business, and management. Many companies in Cornwall and the Isles of Scilly, particularly small and medium-sized enterprises, face complex challenges in finding the essential soft and specific technical skills they need to grow their businesses. These challenges include a shortage of suitable skills, a lack of interest among job applicants, and a lack of relevant work experience. This raises concerns that further growth among businesses could be limited by the shortage of potential graduates with National Vocational Qualification (NVQ) Level 4 and above who possess the necessary skills for employment. As relevant skills become increasingly scarce, many skilled jobs remain unfilled. This project aims to support businesses in acquiring or training the right skills and experienced staff to attain the higher-level skills needed to perform their jobs and maintain productivity.

# **Research method**

We have been in contact with the company and spoken with an official to gain an understanding of the current skills situation and future plans of Build Solar. Most of our communication has been through email and online meetings. The information gathered was focused on current skill challenges and the measures being taken by Build Solar to address skills gaps in the company. Topics included the company's core expertise, hiring and employee rewards, missing skills and competencies, difficulties in finding relevant skills, and how internships can support the company's activities. We used the Skills Assessment and Development Model for our analysis to understand skills shortages in the selected case and how it relates to skill development in the sector.

1. **Skills assessment and development model**

The case study research provides knowledge and expertise needed to be captured from various dimensions. The skills assessment and development model as shown in Figure 1 recognises the variety of knowledge that is divided into the following categories: expertise, skills missing or needed, internships and training availability. Every organisation may have variable knowledge and skill needs in each of these categories, which have been identified as knowledge competency areas.

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| --- | --- |
| **Skills missing/needed*** Current staff level
* Technical skills
* Soft skills
* Customer service
 | **Recruitment*** Vacant positions
* Hiring method
* Difficulties
* Training requirements
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| --- |
| **Expertise** * Knowledge, skills and ability possessed by the business to support performance
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| **Internship** * Talent acquisition
* Productivity
* Skills contribution
 | **Training opportunities** * Free taster courses
* Further education courses
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 *Figure 1: Skills Assessment Model*

1. **Skills Gaps in Build Solar**

Solar companies require a diverse set of abilities, including both soft and technical skills. According to data from an interview, Build Solar has a small team of only three staff but may expand in the future based on business growth. The company is in need of individuals with technical and engineering expertise to handle daily operations and product development. However, a challenge faced by Build Solar is a lack of funding to hire full-time employees as it is a new company. They are also looking to expand in other areas such as business development and financial modelling.

To fill the skills gap, companies often create a profile of the ideal candidate for the position. The interviewee stated that Build Solar seeks a highly skilled individual with experience for employment. The hiring process at Build Solar is informal and not structured, indicating a shortage of skills across the board. Finding the right candidate with the desired skills can be difficult, especially in a remote location like Cornwall. On the bright side, Build Solar has the advantage of access to potential candidates with experience when job openings are advertised.

1. **Project Impact on Build Solar**

The interviewee stated that the intern provided by the project will be beneficial to Build Solar's business. The company plans to utilize the internship to provide additional skills to the company. It was noted that the interns bring real-world experience, which can help to bridge any skills gaps while working for the company. An interview with a company executive highlighted that there may be a need for additional skills. As such, further training in solar technology would be valuable for current staff. There is an opportunity for staff to take the following course which includes the following.

1. Energy Transition: The Challenges and Opportunities Net Zero, climate change mitigation and security of energy supply; what are the challenges in accelerating energy transition?
2. Developing Talent Workshop Location: Truro and Penwith College
3. Project Management Taster Session Location: TR1 3XX Truro & Penwith College Truro
4. **Conclusion**

The SS-HLS project aims to work with SMEs in CIoS to understand their skills issues to enhance their skills & competencies. The objective is to provide the context of skills issues, shortages & recruitment difficulties affecting Build Solar & how the project supports the company in addressing them. Build Solar, a new solar company with a small team of three needs individuals with technical and engineering expertise but faces a lack of funding to hire full-time employees. Build Solar plans to use an intern provided by a project to bring additional skills and real-world experience to the company, addressing skills gaps and potentially providing further training in solar technology for current staff.

# **Disclaimer**

This research was funded through the Smart Specialisation Business Higher Level Skills (SS-HLS) project which is part-funded under the European Structural and Investment Funds (ESIF) programme to help local areas grow. The funds support investment in innovation, businesses, skills and employment, creating jobs.

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