Located in the south-west of England, Bournemouth, Dorset and Somerset have been historically known for their agricultural sectors. Recently, unemployment rates for young people aged 16 to 24 have been disproportionately affected by the Covid-19 pandemic. For example, in Dorset, 60 per cent of the increased unemployment rate was accounted for by people aged 16 to 24. In Somerset, the unemployment rate during the pandemic for this age demographic is roughly 10 per cent while it is below 5 per cent in the rest of the England and 5.7 per cent in London.

Context
The UK government’s Ten Point Plan aims to support the creation of up to 250,000 green jobs in the UK by 2030 and plans to invest over £5 billion to support the development of a green recovery in the country. This plan also seeks to mobilise over £40 billion in private investments. The south-west of England has been highlighted as a main region of focus for the Clean Growth Strategy setting out to reduce emissions from the UK power sector to zero by 2050. The ambition is to have over 80 per cent of electricity generated to come from renewable energies, nuclear power and offshore wind.

Green job opportunities
According to 2015 data, Dorset’s (including Bournemouth) green economy was worth between £0.9 and £2.5 billion per year. This was estimated to be worth between 5 per cent and 15 per cent of Dorset’s overall economy. Somerset has focused on developing its solar power and has committed to increasing their renewable energy use and production in the future. In 2016, the Somerset Energy Innovation Centre was established to develop the renewable potential of the county.
There are **four main green areas** of interest in Bournemouth, Dorset and Somerset:

- **Agri-tech**
  Dorset and Somerset both focus on applying technology and sustainable techniques to farming.

- **Sustainable construction**
  Dorset (including Bournemouth) and Somerset have aimed to reduce building energy consumption.

- **Clean energy**
  Dorset and Somerset are both developing their renewable energy (hydro, solar and wind) sectors.

- **Aquaculture**
  In Dorset, sustainable aquaculture cultivates fish through environmentally minded techniques.

Occupations in these sectors suitable for people with low qualifications include:

- **Aquaculture**:
  Quality supervisor, recirculation manager, husbandry technician, production manager, water-based aquaculture technician, site supervisor.

- **Agri-tech**:
  Machinery technician, technical sales representative, agricultural technicians, technical communicator, agricultural machinery technician.

- **Clean energy**:
  Renewable sales representative, insulating tube winder, welder, power production plan operator.

- **Sustainable construction**:
  Construction worker, contractor, insulation worker, window installer, construction equipment technician.

The Skills-OVATE data gives insights to job opportunities advertised online without distinction to green jobs, but allows the filtering of vacancies suitable for people with low qualifications if we exclude occupations such as professionals, managers or researchers, which likely require a university degree. The analysis of 67,798 online job advertisements (OJAs) found in Bournemouth, Dorset and Somerset (see Annex A) shows that the most common occupations in OJAs that would be suitable for people with low qualifications were
care workers (3,198 OJAs), metal and machine workers (2,753), machine and plant operators (2,500), office clerks (2,057), technical labourers (2,032), drivers and vehicle operators (2,016), sales workers (1,569) and personal service workers (1,132).18

The specific search for green jobs carried out by RAND Europe (see Methods) identified 160 jobs in the UK, including 23 in the Bournemouth, Dorset and Somerset regions. Most of the jobs in those regions were in the private sector (13) and were offered either by green employers (meaning those active in green industries) (8) or other employers (15). While roughly half of adverts (13) provided salary indications, the average annual salary for green jobs in the region amounted to £29,557. Key sectors included public administration and defence, compulsory social security (6), manufacturing of food and beverages (4) and civil engineering (3).

Anticipating that green jobs will be more present across all sectors of economy and across all occupations in future, Cedefop’s EU Skills Panorama forecasts for employment growth are used to identify where more or fewer jobs are expected in general. These projections are available at the country level for the 2020–2030 period. Occupations suitable for people without tertiary education (i.e. excluding managers, professionals, etc.) with the highest employment growth are associate professionals, farm and related workers, elementary workers, and service and sales workers (see Annex A).19

Skills needed for green jobs

Overall, the number of jobs requiring a high-level qualification (RQF4+) in the UK as a whole is expected to grow and the number of workers with qualifications at RQF Level 1 or below (entry level) will fall20 (see also the Cedefop projections in Annex B).

The analysis of skills in the Skills-OVATEx data for Bournemouth, Dorset and Somerset shows that the two most frequently sought characteristics were soft skills, namely attitudes and communication, collaboration and creativity.22 The third-most sought skills were management skills. This is not surprising as these skills are applicable across sectors and occupations that would require different technical or sector-specific skills. Employers also often looked for business administration and law skills, assisting and caring skills, generic programmes and qualifications, working with computers, information and communication technologies, information skills, engineering and construction skills, health and welfare skills, and transporting skills (see Annex A).23

The analysis of green jobs identified by RAND Europe shows that a several of job adverts in Bournemouth, Dorset and Somerset required no qualifications (1 out of 23), vocational training (3), an apprenticeship (1) or other specialised technical qualifications (5). Other adverts required a university qualification (7) and the rest did not provide a qualification requirement (6). Only few job ads required minimum years of experience (3), with an average being three years. In relation to skills, very few advertisements explicitly required green skills and those that did asked for knowledge of environmental topics and issues (2). Other skills sought after by employers included knowledge related to communication, collaboration and creativity (9), management skills (8), attitudes (5), attention to detail (4) and working in a team (3).
Training and education provision for green skills

Dorset has outlined a ‘blue and green’ skills programme that aims to grow the workforce in Dorset in five key areas of interest within the green economy (i.e. environment, energy, marine/aquaculture, agri-food/land and sustainable construction). This skills programme works across training providers, colleges and universities in Dorset to support the developing needs of employers in the region. Employer partnerships are constantly sought after to make sure that the most updated skill set is taught.

In Dorset, small and medium enterprises form almost 90 per cent of the businesses. This is in part due to the county’s ambition of welcoming young businesses and emerging sectors, and giving them the support they need to grow. In line with its emerging green economy, Dorset’s 2022 Skills Action Plan aims to develop existing talent within the region. Dorset has put a post-pandemic plan in place to build a skills development plan at the leadership, management and workforce levels. These plans will include inclusion programmes targeting those young people not in education, employment or training (NEET) across Dorset. Although the mechanisms of these inclusion programmes are not clear, their aims include: (1) targeting more deprived areas and working with young people and their families to enhance aspirations and ambitions, and (2) promoting the skills investment of these young people.

Due to Somerset’s current high number of workers in the nuclear sector and its aim to increase its renewable energy sector, transferring skills and resources from the nuclear sector to the renewable energy sector has been a main focus. The region has invested £8m on the Energy Skills Centre that houses low carbon education and training. The education is often pragmatic and is tailored to the industry’s demand.

Relevant stakeholders and interventions

Within Bournemouth, Dorset and Somerset, 28 key stakeholders were identified in relation to green jobs and green skills. These can be grouped into civil society organisations (e.g. Dorset Local Enterprise Partnership, Sustainable Dorset, Dorset Coast Forum), training organisations (e.g. Somerset Skills & Learning, Bridgwater & Taunton College, Skills Support for the Workforce, Bournemouth and Poole College) and employers (e.g. Bournemouth Water, Alaska Ecological Contracting).
When it comes to green interventions, few were specifically dedicated to people with low qualifications and most were tailored to young people. The most relevant interventions are outlined below.

**Wild Paths**
Project set to give people from diverse backgrounds the opportunity to undertake a ten-month-long training placement in order to learn conservationism.

The programme is aimed to meet skills shortage in the heritage sector and help diversify the workforce.42

**Agriculture and Horticulture Scholarship**
This scholarship is awarded by the Bridgwater & Taunton College. It offers a £500 reward for a full-time student of an agricultural or horticultural subject field.

Selection criteria are the following:
- High academic achievement
- Relevant extracurricular activities
- Financial need.43

**Vulnerable Groups Bursary**
This bursary is aimed at students under 19 who are considered to be vulnerable at the Bridgwater & Taunton College. It offers a £1,200 for students applying to a programme of at least 30-weeks duration.

Selection criteria are the following:
- Young people living in Local Authority Care, or receiving Income Support, Universal Credit or Personal Independence Payment.
- Unaccompanied asylum-seeking children (under 18).44

**FLAG**
This initiative is delivered by the Dorset Coast Forum that encourages community-led development in the areas of aquaculture between Swanage and Beer.

The key priorities are to:
- Improve the aquaculture sector in Dorset.
- Enable safe, sustainable working ports and harbours by improving their infrastructure.
- Enable diversification and training to the sector to attract a younger workforce.45
Summary conclusion

- Both Dorset’s 2022 Skills Action Plan and Somerset’s Energy Skills Centre have initiatives to increase the employability and skill level of young people in their area.
- In Bournemouth, Dorset and Somerset, only few green job opportunities aimed at people with low qualification could be identified. As the green sector in the region is expected to grow, especially regarding renewable energies, there will be an increasing need to narrow down the inequality gap.
- Metal and machine workers and machine and plant workers are the main occupations in sectors with large proportions of green jobs for workers with low qualifications.
- Skills frequently sought by employers were soft skills (attitudes, communication and collaboration), management skills, generic programming skills and qualifications, computers skills, information and communication skills, information skills, engineering and construction skills, and transporting skills.
- Only a few interventions aimed at developing green skills and helping people into green jobs could be identified. These were primarily focused on young people with low qualifications.

Methods

1. **Targeted documentation review**: The review followed a protocol that spelled out the search terms, inclusion and exclusion criteria (see details in the final report). The full list of sources consulted is presented in Notes and References.

2. **Analysis of EU Skills Panorama data**: The analysis included Cedefop projections of future employment growth across all sectors and occupations, as well as the changes in the level of education expected in the UK by 2030. The analysis used UK data based on research conducted by Cedefop before the UK’s exit from the European Union on 31 January 2020. The dataset uses NACE Rev. 2 (statistical classification of economic activities) and classification of European Skills, Qualifications and Occupations (ESCO).

3. **Analysis of Skills-OVATE data**: The database provided by Cedefop collates OJAs from multiple sources, including private job portals, public employment service portals, recruitment agencies, online newspapers and corporate websites. The dataset uses NACE Rev. 2 (statistical classification of economic activities) and International Standard Classification of Occupations (ISCO-08). In December 2021, there were 67,798 OJAs in the Skills-OVATE database for Dorset and Somerset covering the period from the third quarter of 2020 to the second quarter of 2021. The database does not allow filtering out green job vacancies or opportunities only for people with low qualifications. OJAs do not reflect the market demand for jobs across all occupations and sectors equally well: some sectors or professions are overrepresented if they are more likely to advertise online, while others are underrepresented.

4. **Online search for green jobs and data analysis**: The search of www.greenjobs.co.uk and uk.indeed.com conducted on 23 September 2021 identified 23 green job advertisements in Bournemouth, Dorset and Somerset. Data was extracted, coded and cleaned. Descriptive statistics was used to analyse the results.
Annex

Annex A. Analysis of Skills-OVATE data (Q3 2020–Q2 2021)

Figure 1. Highest sought occupations in Dorset and Somerset

- Researchers and engineers
- ICT professionals
- Legal and social associate professionals
- Office associate professionals
- Health professionals
- Business managers
- Office professionals
- Care workers
- Metal and machinery workers
- Technical managers
- Teaching professionals
- Science and engineering technicians
- Machine and plant operators
- Office clerks
- Technical labourers
- Health associate professionals
- Drivers and vehicle operators
- Sales workers
- Legal and social professionals
- ICT technicians

Source: Cedefop (2022)
Note: Cut-off point is the median of OJAs per occupation (1,834).

Figure 2. Highest sought skills in Dorset and Somerset

- Attitudes
- Communication, collaboration and creativity
- Management skills
- Business, administration and law
- Assisting and caring
- Generic programmes and qualifications
- Working with computers
- Information and communication technologies (ICT)
- Information skills
- Engineering, manufacturing and construction
- Health and welfare
- Handling and moving

Source: Cedefop (2022)
Note: Cut-off point is the median of OJAs per skill (11,514).
Annex B. Analysis of EU Skills Panorama data

Figure 3. Future employment growth (% change) across occupations in the UK in 2020–2030

- Associate professionals
- Farm and related workers
- Elementary workers
- Managers
- Service and sales workers
- Professionals
- Operators and assemblers
- Trades workers
- Clerks

Source: Cedefop (2021)

Figure 4. Current and future employment for educational level possessed in the UK

- High
  - 2020
  - 2030
- Medium
  - 2020
  - 2030
- Low
  - 2020
  - 2030

Source: Cedefop (2021)
Notes and References


17. Skills-OVATE database by Cedefop collates OJAs from multiple sources, including private job portals, public employment service portals, recruitment agencies, online newspapers and corporate websites. In December 2021, there were 67,798 OJAs in the Skills-OVATE database for Dorset and Somerset. The database does not allow filtering out green job vacancies only. OJAs do not reflect the market demand for jobs across all occupations and sectors equally well: some sectors or professions are overrepresented if they are more likely to advertise online, while others are underrepresented.

18. Cedefop. 2022. Skills-OVATE data. Occupations such as professionals, managers or researchers, were excluded, as these likely required a university degree.
22 Generic programmes and qualifications are those providing fundamental and personal skills education which cover a broad range of subjects and do not emphasise or specialise in a particular broad or narrow field. See ESCO (homepage). 2022. As of 5 June 2022: https://ec.europa.eu/esco/portal/skill
23 Cedefop. 2022. Skills-OVATE data. Cut-off point was the median of OJAs per skill (14,428).
31 Bridgwater & Taunton College. 2022. ‘Energy Skills Centre.’ As of 5 June 2022: https://www.btc.ac.uk/the-college/campuses/bridgwater-campus/energy-skills-centre/
32 Dorset LEP (homepage). 2022. As of 5 June 2022: https://www.dorsetlep.co.uk/
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This study focused on people with low qualifications, meaning those with at most a lower secondary qualification who experience a high risk of poverty and social exclusion, and explored green job opportunities that exist for them, including those that would require reskilling (training to obtain different skills) or upskilling (training to obtain more advanced skills). In this study (unless stated otherwise), green jobs are understood as jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources, and green skills denote skills needed to adapt products, services and processes to climate change and the related environmental requirements and regulations. Evidence presented here includes national-level data (where regional and local information was not available) and focuses on data specific to green jobs or people with low qualifications. Full details can be found in the main report.

For more information on this publication, visit www.rand.org/t/RRA1603-1

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