TSL review: **Clean Energy**
Evidence Submission for SOC 3111, 3119, 3544
Submitted by Universities UK International (UUK) and the Universities and Colleges Employers Association (UCEA)

Overview

UCEA surveyed member higher education institutions (HEIs) based on the MAC's stage 2 call for evidence questionnaire. UCEA's survey was structured around the occupations at RQF levels 3- 5 previously identified by HEIs for possible inclusion on the Temporary Shortage List (TSL).

HEIs play a central role in supporting the UK's clean energy and net-zero ambitions through research, testing, innovation and skills development across renewable energy, energy systems, materials science and sustainability technologies.

Survey responses from higher education (HE) employers identify a small number of technical and analytical roles as critical to the delivery of clean energy-related activity within higher education. This submission draws on employer evidence relating to:

- **SOC 3111 – Laboratory Technicians**
- **SOC 3119 – Science, Engineering and Production Technicians**
- **SOC 3544 – Data Analysts**

Responding HEIs highlighted these roles as essential to operating specialist facilities, supporting applied research, and enabling innovation in clean energy systems. In several cases, respondents selected these occupations without additional free-text detail, reflecting broad agreement on their importance.

SOC 3111

Overview

Laboratory technicians support clean energy research, testing environments and specialist facilities within higher education. Survey responses show consistent support for retaining SOC 3111 where it underpins clean energy and sustainability research.

Drivers of shortage

Respondents highlighted:

- Specialist technical skills linked to energy systems and materials
- Competition from industry and commercial research
- Limited domestic pipelines for niche expertise

Recruitment trends and outlook

Demand is expected to increase alongside expansion of clean energy research and infrastructure.

Impact of removal from TSL

Removal would reduce capacity to deliver clean energy research and slow progress against net-zero objectives.

SOC 3119

Overview

SOC 3119 technicians support applied engineering and technical functions linked to clean energy innovation.

Drivers of shortage

Responding HEIs cited competition from industry and difficulties recruiting technicians with blended engineering and digital skills.

Impact of removal from TSL

Removal would constrain research delivery and reduce HE contribution to clean energy innovation pipelines.

SOC 3544

Overview

Data analysts support modelling, optimisation and monitoring of clean energy systems.

Drivers of shortage

Responding HEIs reported strong cross-sector competition and rapidly evolving technical requirements as key drivers.

Impact of removal from TSL

Removal would weaken analytical capacity critical to clean energy research and system optimisation.

Conclusion

Employer evidence indicates that SOC 3111, SOC 3119 and SOC 3544 are critical to the delivery of clean energy research and innovation within HE. Survey responses point to ongoing recruitment challenges driven by specialist skill requirements, competition from industry, and limited domestic pipelines.

HE employers report that while HEIs are investing in upskilling, training, progression and domestic recruitment, these measures are insufficient to meet immediate and medium-term demand. Removal of these occupations from the TSL would constrain research capacity, delay innovation and reduce the HE sector's ability to support clean energy objectives.

Retention of these occupations on the TSL is therefore important to sustaining the contribution of HE to the UK's clean energy transition.