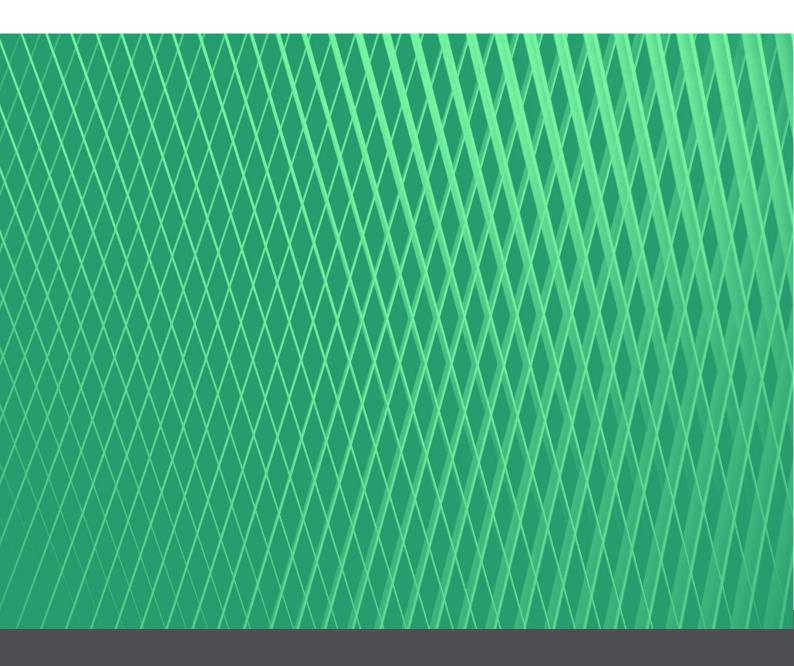
Chartered Environmentalist Guidance

2024 onwards Version: 1.0



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Introduction

This guide outlines how to apply for Chartered Environmentalist (CEnv) registration and what the process involves.

The application form can be found on the website.

Download application form

Please ensure you read this document thoroughly to avoid any delays in processing your application.

About the Chartered Environmentalist title

The Institution of Structural Engineers can grant Chartered Environmentalist (CEnv) registration on behalf of the Society for the Environment to existing Fellows (FIStructE) or Members (MIStructE) who can exhibit proficiency in sustainability and environmental practices relevant to their role as structural engineers.

This globally recognised registration reflects a high level of skill and experience working in sustainability. Registration as a CEnv demonstrates that an individual has been judged by their peers to be working at the highest standards in the environmental aspects of their work. Holding CEnv registration demonstrates a high level of knowledge around sustainability and environmental issues, and both leadership and practical application of this knowledge in their field of work.

Route to Chartered Environmentalist

Application for CEnv registration requires demonstration of competence in line with 11 competences that are set out by the Society for the Environment (SocEnv). These are outlined from page 7, alongside examples of ways in which structural engineers may choose to demonstrate competence.

The route to becoming registered as CEnv involves the following steps:

- 1. Prepare a portfolio of your work, comprising a report, supporting evidence, CV and CPD record.
- 2. Complete CEnv Application Form.
- 3. Submit both the portfolio and form by email to membership@istructe.org.
- 4. Once your application has been received we will contact you about paying the application fee of £200
- 5. Attend interview by two relevant and experienced institution members, at least one of whom will be a CEnv registrant.
- 6. If successful, the Institution will contact you to request your initial registration fee.
- 7. On payment of the registration fee your details will be transferred to the Society for the Environment who will complete the registration process and send you a certificate.



Portfolio guidance

All candidates are required to prepare a portfolio of their work ahead of application, which must demonstrate that you attained at least the minimum standard outlined for each competence listed in this guidance document. It is a vital element of this process, and you should devote the necessary time and care to its production.

The portfolio must be a single PDF, all pages A4 sized, with four main aspects within it:

- A written **report**, clearly sub-divided into the competences, of no more than 2500 words total across the whole report (not including the supporting evidence, CV or CPD).
- Up to 25 pages of supporting evidence, cross-referenced from the report, that should be readable when printed at A4.
- A CV of relevant experience, with a limit of 3 pages.
- Records of your last three years of CPD that is relevant to your application, with a limit of 9 pages.

Where landscape pages are included (e.g., in the supporting evidence), these are to have been rotated by the applicant so that the reviewer does not have to do this.

The report and supporting evidence must contain evidence relating to all 11 competences, and allow easy cross-referencing between the report and the supporting evidence. You only need to cover 9 of the 11 competences, as competence D1 is demonstrated through your CPD record, and D3 is covered through a declaration within the CEnv Application Form.

The report must be sub-divided by competence. Make sure that the information provided is relevant and relates directly to the competences and how you have achieved the required standard.

You will be expected to include examples of work from a variety of projects that you have worked on. Where appropriate, you should provide comments and annotations on the supporting evidence in the appendix, to help demonstrate your input to the work and its relevance to the competences. All supporting evidence must be your own.

The portfolio can refer to activities undertaken outside of your main place of work, for example through volunteering or running local sustainability initiatives. However, a variety of activities is key, so you are encouraged to gain experiences within your main place of work too, as far as possible.

General advice for writing the report:

Personal: the reviewers will not be interested in what your company does, they are only interested in what you have done. Therefore, ensure that you state what you have personally undertaken and try to avoid generic statements about how your company operates.

Positive: do not sell yourself short. Try to avoid statements such as 'I have limited/some experience' – you either have experience or not. Try and ensure that the correct words are applied to the relevant competence, e.g., if it's an 'ability' competence, do not use 'experience' or 'knowledge' always use 'ability'.

Practical: ensure you state how you have achieved the competence standards; candidates often fall into the trap of simply describing the competence or stating why it is important. This is not what the reviewers will want to know.

An example report and evidence appendix can be downloaded from the website.



Applying for interview

When you are ready to apply, you will submit your combined report and the <u>CEnv Application Form</u> to the Membership Team at <u>membership@istructe.org</u>

Your form includes a section to be signed by your supporter, who can either be a Fellow (FIStructE) or Member (MIStructE) of the Institution of Structural Engineers. Your supporter may be contacted during the process to verify any aspect of your application. They should know enough about your professional work in relation to sustainability and the environment to be able to speak to this if contacted.

A supporter does not confirm that you are qualified to be a CEnv, but rather that you are a fit and proper person to become a CEnv after successfully completing the application process.

Your interview fee of £200 will be requested by the Membership Team once you have submitted your application form.

The interview

Once your application has been processed, you will be contacted by the Institution with details of your two reviewers who will set up a mutually convenient time for your interview. The interviews are set up on an ad-hoc basis using a small pool of reviewers, therefore we cannot guarantee the turnaround times, but will keep you updated as your application progresses.

The reviewers will have read your portfolio in advance of the interview, and the interview itself will then be used to verify that you have met the minimum standards for each competence. Interviews are conducted remotely via Microsoft Teams or Zoom.

The interview will normally be between 60 to 90 minutes. This can vary according to how long it takes for the reviewers to determine whether you have reached the minimum standard for each competence. You will be asked to start by speaking for around three minutes about yourself and why you wish to become a CEnv. This should be done without any slides – the reviewers want to hear from you!

During the interview it is important to note that it is your responsibility to demonstrate that you have achieved the minimum standard for all 11 competences.

After the interview, the reviewers will inform the Institution of their decision which is then reviewed and approved by the Applications and Professional Review (A&PR) Panel before your result is released to you. The A&PR Panel meets quarterly and dates of the meetings are published annually on the website.

If you have failed the interview, the Institution will email you and advise of the competences where you did not meet the standard. If you fail three or fewer competences, you will be re-interviewed on those competences only. If you fail four or more competences, you will be required to re-sit the full interview. In both cases an updated submission will be required, and you will be required to pay the interview fee again.

On request the Institution will provide you with the feedback comments from your reviewers which should help you understand where your application lacked sufficient detail. There is no limit on the number of times that you can apply for CEnv registration. However, should you fail three or fewer competences, you will have three years to pass the failed competences before being required to re-sit the full interview.



Continued Professional Development

As part of the interview and your application, you will be assessed on your commitment to CPD relevant to the CEnv registration. You will also commit in the CEnv Application Form to undertaking CPD activity in sustainability matters, beyond the minimum required by the Institution, to sharing your knowledge in accordance with the ideals of the Institution as a Learned Society.

Evidence of future CPD should be submitted as part of your annual CPD record via My Account on the Institution's website.

Please note that the Institution operates mandatory reporting of CPD. Each year, 2000 members are selected to submit a CPD record for the previous year. If you are a CEnv registrant, then the Institution will expect to see demonstration of CPD in sustainability manners that go beyond the minimum required by the institution, to maintain the minimum standards of the CEnv competences.

Ethics

All members of the Institution are expected to uphold ethical values. You should demonstrate within your application that you are committed to working in an ethical and socially responsible manner, as outlined in the Institution's Code of Conduct.

The Code of Conduct states that all members shall:

- Act with integrity and fairness
- ▶ Have regard to the public interest and to the interests of all those affected by their professional activities
- ▶ Uphold the reputation of the profession
- Maintain and broaden their competence, and assist others to do so
- Undertake only those tasks for which they are competent
- Exercise appropriate skill and judgement
- ▶ Not maliciously or recklessly injure or attempt to injure the reputation of another person
- Avoid conflicts of interest
- ▶ Members must disclose to the Institution if they have been convicted of a criminal offence.

The Institution believes that ethics should apply throughout all aspects of an engineer's working life, and it is not therefore represented by a single competence as ethical issues can have an influence across multiple competences. The reviewers expect to see examples of how you have upheld ethical values relevant to your working practices within your report, and you may also be asked to discuss this during your interview.



Appeals procedure

The Institution has an appeals procedure for candidates who have been unsuccessful in their application. An appeal may be made on the following grounds only:

- ▶ Extenuating circumstances occurring immediately before or during the application process or interview, and/or
- ▶ Departure from the Institution's application or interview procedures.

Full details of the procedures are published on the Institution website.

Please note that recording of your interview by any means is not permitted and any such recording cannot therefore be used as evidence in an appeal or other disagreement with the judgement of the reviewers.

Chartered Environmentalist competences

The following list of compulsory competences detail the minimum standards required for candidates intending to apply for CEnv registration through the Institution of Structural Engineers.

General requirements

Chartered Environmentalist (CEnv) registration displays a level of understanding and commitment towards the protection of the environment that goes beyond what is required to pass the Institution's Chartered Structural Engineer (MIStructE) requirements.

From 2023, basic embodied carbon literacy has been a core skill of the MIStructE requirements, and so candidates applying for CEnv registration must demonstrate both a deeper understanding of embodied carbon, and a broader understanding of sustainability beyond embodied carbon, than is required by the institution's minimum MIStructE requirements.

Standards

The minimum standards required for the competences are:

| Standard | | Description |
|----------|------------|---|
| K | Knowledge | A knowledge and understanding of the subject and its application is required. |
| E | Experience | The subject should be performed independently or under supervision. |
| В | Ability | Perform the subject without supervision and be competent to advise others. |



A Application of knowledge and understanding of the environment to further the aims of sustainability

| SocEnv competence | IStructE standard and examples |
|--|---|
| A1. Understand the sustainability principles applicable to the management of the environment. (1) Critically analyse complex environmental information, concepts and theories to determine | This competence is intended to demonstrate broad knowledge of sustainability principles – both those directly relevant to structural engineering, as well as wider sustainability issues, e.g.: |
| sustainable courses of action. (2) Understand the environmental impact of the area of study or work. (3) Understand the importance of natural cycles and biodiversity in sustainability and identify strategies for their maintenance and enhancement. | The principles that drive the embodied carbon of key structural materials, limitations of this, and expected future decarbonisation plans. |
| | The structural engineer's impact on whole life carbon, operational carbon and embodied carbon. |
| | Environmental and societal impacts of material sourcing and circular economy. |
| | The relevance of regenerative design to your work. |
| | Broad knowledge of aspects such as the UNSDGs, work of the IPCC, principles of ESG ratings, sustainable economic models, etc. |
| A2. Apply environmental knowledge and principles in pursuit of sustainable environmental management. | This competence is intended to demonstrate an <u>ability</u> to apply sustainability principles to their work, e.g.: |
| (1) Develop strategies to address complex situations that involve many interacting environmental factors.(2) Determine measures to deliver continuous improvement in sustainable environmental management.(3) Negotiate contracts and arrangements with relevant stakeholders. | Interpreting briefs to understand their environmental implications. |
| | Undertaking life cycle analysis and looking for opportunities to reduce impacts. |
| | Developing environmental assessment criteria for a project. |
| | Communicating how design options can minimise environmental impacts. |
| | Undertaking research targeting reductions in industry emissions, nature loss and resource use. |
| | Learning from results to improve their approach towards structural sustainability. |
| | Working with others to implement sustainable structural solutions across a team. |
| | Reviewing projects to identify and share lessons learnt. |
| A3. Identify, analyse, and anticipate the impact of problems and environmental trends to develop practical sustainable solutions. | This competence is intended to demonstrate an <u>ability</u> to develop innovative solutions in the context of a wide range of environmental issues beyond the brief, e.g.: |



- (1) Identify and assess the impact of complex problems working sometimes with incomplete data
- (2) Demonstrate self-direction and originality in tackling and addressing problems.
- (3) Demonstrate a critical awareness of current environmental matters and trends and trends reflecting relevant heritage where appropriate and anticipate and assess future impacts.
- (4) Critically analyse and embrace new environmental information and advance knowledge, skills, and competence in the environmental field to develop practical sustainable solutions.

- Interrogating and challenging problems, designs, briefs, research topics with respect to wider environmental issues.
- Developing solutions that take account of industry and environmental trends and understanding.
- Developing buildable solutions with environmental benefits beyond just embodied-carbon.
- Finding opportunities for novel research to progress the field of sustainable structural engineering.
- Generating sustainable concepts and ideas into solutions that reduce the environmental impact of a project.
- Incorporating aspects of reuse, circularity and regenerative design into solutions, even when not asked to.
- Maintaining awareness of where industry is going and problems that lie ahead
- Delivering research or teaching to respond to the sustainability needs of the profession



B Leading sustainable management of the environment

| SocEnv competence | IStructE standard and examples |
|--|---|
| B1. Promote behavioural and cultural change by influencing others to secure environmental improvements that go beyond statutory requirements. | This competence is intended to demonstrate experience in driving behavioural change in other engineers, colleagues, and collaborators, e.g.: |
| (1) Develop good practices that go beyond statutory requirements by learning from results. | Advocating for wider change through presentations, reports, events etc. |
| (2) Lead, advise and support others to improve their understanding of the wider environmental context. | Contributing to the work of volunteer groups across the industry, e.g. IStructE Sustainability Panel. |
| (3) Advocate sustainable management of the environment by identifying issues, potential risks, benefits and opportunities and influence others, in particular from other disciplines, to contribute to environmental protection and improvement. | Creating and delivering training on a range of environmental aspects. |
| | Working with others to help them develop their own knowledge and thinking around broad aspects of structural sustainability. |
| | Working to upskill more senior colleagues and collaborators on structural sustainability. |
| | Promoting collective continual improvement through reflections on lessons learnt from projects, research, mistakes, lectures etc and feeding back with colleagues, collaborators and wider industry |
| | Enabling a culture of learning around structural sustainability |
| B2. Develop and maintain a strategic environmental approach. (1) Develop innovative strategies for sustainable development and environmental improvement. | This competence is intended to demonstrate experience in approaching structural sustainability strategically, e.g: Developing strategies for their own approach |
| development and environmental improvement. (2) Promote inclusion and diversity and engage and collaborate with others to promote interdisciplinary approaches to environmental challenges. | to working sustainably within the context of their industry constraints. |
| | Proposing and agreeing strategies for incorporating sustainability into a project. |
| (3) Evaluate constraints and exploit opportunities for the development and transfer of environmentally appropriate techniques, skills, | Working to find opportunities to incorporate sustainability across a wide portfolio of projects with colleagues and teams. |
| methods, processes, and behaviours. (4) Identify and manage risks to the environment encompassing health and safety, technologies, business, and reputation. | Collaborating with other disciplines, institutions, firms, research bodies, to develop communal knowledge. |
| | Forming research and teaching plans to maximise sustainability outcomes. |
| B3. Demonstrate leadership and management skills. | This competence is intended to demonstrate ability in leading and managing others to deliver sustainable structural outcomes, e.g.: |
| (1) Demonstrate autonomy and judgement in managing complex environmental and sustainability issues. | Exercising autonomy and judgement when making sustainability decisions relating to their work. |



- (2) Lead, motivate and convince others to agree and deliver environmental and sustainability objectives.
- (3) Specify the objectives of a task, implement it and critically evaluate the outcome.
- (4) Plan and manage continuous environmental improvement.
- Understanding where their judgement aligns with, and goes against, industry consensus.
- Influencing clients, colleagues and collaborators to pursue more sustainable solutions.
- Helping others to improve the sustainability of their own work.
- Striving for continuous improvement in terms of sustainability leadership through selfreflection, and enabling others to do the same.



C Effective communication and interpersonal skills

| SocEnv competence | IStructE standard and examples |
|--|---|
| C1. Communicate the environmental case, confidently, clearly, autonomously, and competently. | This competence is intended to demonstrate experience in communicating environmental issues to others, e.g.: |
| (1) Deliver presentations to a diverse range of audiences. | Regularly presenting on sustainability to different types of audiences such as clients, colleagues, contractors, or the public. |
| (2) Chair, lead and contribute to debates, meetings, and discussions.(3) Lead and promote stakeholder engagement. | Leading/chairing design or research workshops with sustainability objectives. |
| | Working with sustainability volunteer groups in the built environment. |
| C2. Ability to liaise with, negotiate with, handle conflict and advise others, in individual and/or group environments (either as a leader or member). | This competence is intended to demonstrate ability in professionally advising, influencing and negotiating with others to achieve sustainable outcomes, e.g.: |
| (1) Build relationships to capture and incorporate the opinions and contributions of others. | Challenging briefs to unlock lower-impact solutions that achieve the client's desired |
| (2) Understand the motives and attitudes of others to reach agreement. | outcomes. Influencing decision-making to introduce more sustainable design options on projects. |
| (3) Lead decision-making and champion group decisions.(4) Resolve conflict to achieve common goals | Persuading funders to back research likely to reduce the environmental impacts of |
| within groups, and tasks. | structural engineering. |
| | Bring clarity to helping others see through uncertainty, to guide them towards the most sustainable solution. |
| | Identifying suitable positions of compromise between environmental ambitions and other project drivers. |
| | |
| | |



D Personal commitment to professional standards, recognising obligations to society, the profession and the environment

| SocEnv competence | IStructE standard and examples |
|---|---|
| D1. Plan, undertake and evaluate CPD activities to maintain and enhance competence in area of practice. (1) Plan, undertake, reflect on, and evaluate CPD activities. | Not to be covered in report Demonstrated through CPD submission appended to applicant's report. |
| D2. Assess and resolve environmental ethical issues. (1) Identify, assess, and resolve, and encourage others to resolve, environmental ethical issues. (2) Improve environmental practice by addressing complex ethical issues. | This competence is intended to demonstrate knowledge of environmental ethical dilemmas, e.g.: The undertaking of projects that are particularly unsustainable. Briefs where sustainability ambitions conflict with other design considerations Briefs where separate sustainability drivers conflict with one another (e.g. upfront vs. whole-life emissions) Decisions made where narrow project-only thinking resulted in broader system damage (such as reducing project emissions in a manner that increases global emissions). Occurrences of poor environmental practices by others. |
| D3. Understand demonstrate and advocate compliance with relevant codes of conduct and practice. (1) Understand, comply, and advocate compliance with relevant codes of conduct and practice. | Not to be covered in report Demonstrated by signing the declaration on the CEnv Application Form |

