

Participant Information Sheet/Information about the research

Title of Study: Sustainable alternative materials for traditional concrete produced from renewable and waste sources in the UK.

We are inviting you to take part in a research study. Before you decide, it is important that you know why we are doing the study and what is involved. Please read the following information carefully.

What is the purpose of the study?

The purpose of the study is to examine sustainable alternative materials to replace aggregates for traditional concrete production from renewable and waste sources in the UK. The results will be based on existing literature and the opinions of construction academics and professionals to analyse the current views in the construction industry. This study is part of the dissertation for a Bachelor of Science degree. The objectives of this study are:

- 1. To identify different sustainable alternative materials available to replace aggregates in concrete produced from renewable sources and waste.
- 2. To assess the level of use of sustainable alternative materials from renewable sources and waste to replace aggregates in concrete production in the UK construction industry.
- 3. To identify the factors influencing the level of use of sustainable alternative materials from renewable sources and waste to replace aggregates in concrete production in the UK construction industry.

The contribution of this study will be to provide an overall review of alternative materials for concrete and which material would be the most suitable replacement for aggregates in concrete. This research will contribute to the ongoing debates to provide solutions, to achieving net zero, as well as to support the UK construction industry in meeting the United Nations Sustainable Development Goals for 2030. The research will provide a current view of the material crisis in the construction industry and how this can be tackled, alongside improving the environmental sustainability of construction materials. To achieve this aim and contribute to the ongoing debates, the study is set to address a research question on what the most suitable sustainable alternative material(s) is/are produced from renewable sources to replace aggregates in traditional concrete in the UK.

Am I eligible to take part?

You are being invited to take part because you are either a construction academic or a construction professional and have current knowledge of the construction industry and the need for alternative building materials. If you are not a member of the construction industry you are not eligible to take part.

Do I have to take part?

Participation is completely voluntary. You should only take part if you want to and choosing not to take part will not disadvantage you in any way.

What will I be asked to do?

You will be asked to complete a 15-minute questionnaire asking questions regarding sustainability in the construction industry and alternative aggregates for concrete. The questionnaire is anonymous meaning you are not required to provide any personal information. You will be asked what your job title is but as there is no way of knowing who participated in this study, we will not be able to trace your job title back to you. We need to ask about your job title to understand what your job entails and how that may affect your views on the topic. Once you have completed the questionnaire you will have fulfilled all the requirements for participating in this study. The first step in the questionnaire will be to consent to taking part in this study. This is so you understand what is being asked of you and that we have permission to use your data in this study.

Will I be paid expenses for taking part?

No, you will not be paid as being a participant online requires you to take a 15-minute online questionnaire which can be accessed at any time through the internet.

What are the possible benefits/risks of taking part?

There is no risk of participating in this study as your data will be anonymous. The benefits of taking part in this study are expanding your knowledge on sustainability in the construction industry and alternative aggregates that can be used as a replacement for traditional aggregates in concrete. You will also be contributing to the research on alternative materials and may help to provide a solution to challenges in the construction industry regarding traditional building materials.

Will anyone know I have taken part?

The University of Lincoln (UoL) is the sponsor for this study based in the United Kingdom. We will be using information from you to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly.

The research team will keep your name and contact details confidential and secure. The research team will use this information as needed, to contact you about the research study, make sure that relevant information about the study is recorded for your care, and oversee the quality of the study. Certain individuals from UoL may look at your research records to check the accuracy of the research study. The people who analyse the information will not be able to identify you and will not be able to find out your name or contact details.

Where will my data be stored?

The data obtained from the study will be stored securely on the university OneDrive in password-protected files. Only the researcher/researchers will have access to it. Paper copies will be stored in a secure cabinet/office at the University. The data from this study *may* be put in an Open Access repository for other researchers to use in future research. If so, responses will be anonymised and any personal data (e.g. contact details) will be removed.

What will happen if I don't want to carry on with the study?

You are free to withdraw at any point from this study, without having to give a reason, by contacting the main researcher.

If you choose to withdraw from the study, the information you have given us up to this point will be deleted/destroyed. However, once the anonymised data set has been created it will not be possible to remove your anonymised data from the analysis.

What will happen to the results of the research study?

The research will be completed on 22nd May 2023. This research is part of an educational qualification and is not intended to be published. If you wish to receive the results you will have to email the main researcher personally.

Who is organising and funding the research?

This research is being organised by Katie Kitchen at the University of Lincoln.

Who has reviewed the study?

All research conducted by the University of Lincoln is looked at by an independent group of people, called a Research Ethics Committee, to protect your rights, dignity and well-being. This study has been reviewed and given a favourable opinion by a University of Lincoln Research Ethics Committee 13822.

What if there is a problem?

It is very unlikely that this study would cause you any harm or problems. If you have a concern or a complaint about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. The researchers' contact details are given at the end of this information sheet.

If you remain unhappy and wish to complain formally, you can make a formal complaint through the University complaints procedure or by contacting ethics@lincoln.ac.uk.

Further information and contact details

Contact details

Main researcher: Katie Kitchen Email: 19697209@students.lincoln.ac.uk or

katielkitchen@hotmail.co.uk

Supervisor: Olatunji Abisuga Email: oabisuga@lincoln.ac.uk