

# Questions & Answers

## Queries posted by teachers during the NPA Climate Change and Sustainability webinar event on 16th Jan 2024

#### I can’t find the link to the UASPs for the NPA on the SQA website?

You will find the Climate Change UASPs in the NQ Geography section of the SQA secure site, and the Sustainability UASPs in the NQ Environmental Science section. Your SQA Coordinator will have log in details for the secure site.

#### Is it possible to just enter pupils for one of the units rather than the whole course?

Yes, candidates can be entered for individual units.

#### How might we ensure proper practice when pupils have strong AAA requirements (1-1 SLA support, reader, scribe, extra time, separate accommodation)?

You can find advice on assessment arrangements using the following link: [About assessment arrangements - Guidance and support - SQA](https://www.sqa.org.uk/sqa/74922.html).

#### Is it appropriate for all work to be completed digitally?

Assessments can be completed digitally but centres must ensure that the conditions of assessment are adhered to, and that candidate evidence is kept secure. They must also ensure that the evidence is each candidate’s own work. SQA UASPs must be kept secure, and centres should ensure that they cannot be saved locally by candidates or shared more widely.

#### Are there any teaching resources available for the NPA?

Sustainability – Environmental Science teachers have provided resources (workbooks, revision materials etc) on the Sciurus forum. This is a free-to-access forum administered by teachers and is not an SQA resource, however, to access the forum, email Donna.Clark@sqa.org.uk and your contact details will be forwarded to the forum administrator.

Climate Change and Sustainability

Teachers from Gairloch High School are happy to share teaching and learning materials for the Climate Change and Sustainability NPA that they have produced.

There are also some resources available on the SAGT website.

### Geography – Climate Change unit

#### If a National 4 Geography pupil is completing the Climate Change topic, can they also be awarded the NPA?

Yes, but you must ensure that you use the unit code for the ‘Global Issues in the context of Climate Change’ unit and the pupil must also successfully complete the Sustainability unit.

#### We have a solar panel experiment for the Sustainability unit. Can that also count as a Geography one, ie not repeating work?

This could contribute to the National 4 AVU unit. Centres should ensure that all the Outcomes and Assessment Standards for both units are completed by their candidates. For example, the Geography National 4 AVU Assessment Standard 1.1 states ‘Choosing, with support, an appropriate geographical topic or issue for study’, so there would need to be choice within the experiment**.**

#### Is interpreting a map (eg stating CO2 emissions) suitable for a graphical source?

Yes, as long as the map has numbers on it.

### Environmental Science – Sustainability unit

### Outcome 1

#### Is there a list of numerical skills that pupils should be proficient in before undertaking the assessment, eg ratios and fractions?

BGE Experiences and Outcomes and benchmarks for numeracy and mathematics can be found on the Education Scotland [website](https://education.gov.scot/curriculum-for-excellence/curriculum-for-excellence-documents/curriculum-for-excellence-benchmarks/).

#### Are both positive and negative effects acceptable?

An effect may be positive or negative but will depend on the context. For example, replacing a single carriageway with a dual carriageway will have considerable negative impacts during the construction phase, but may have both positive and negative impacts once in use. Possible positive effects could be that reduced travel times lead to a decrease in fuel use for businesses and a reduction in fuel emissions. Possible negative effects could be that increased speed leads to greater risk to wildlife and increased noise pollution.

#### Some of the suggested investigations appear to be research-based (eg investigate carbon footprint or where our food comes from). Can online safety considerations count for Assessment Standard 1.1 if research-based investigation is used?

The suggested investigation examples included in the unit descriptor and UASPs for the Sustainability unit are out of date and are currently being updated for use in session 2024-25 onwards. These updates clarify that Outcome 1 must involve a practical investigation, either experimental or fieldwork. A research-based investigation, therefore, using questionnaires or surveys would not be appropriate. The updated suggested investigation examples reflect the required scientific focus. These are only suggestions, and you may have your own ideas, but you should ensure that the proposed investigation relates to a key area of the unit and allows your candidates the opportunity to meet all the assessment standards.

#### Can we use the AVU from National 4 Environmental Science for the Sustainability unit?

There is some overlap between the assessment standards for National 4 Outcome 1 and the AVU. Outcome1, however, does not have associated marks and the assessment standards are not as in-depth as the AVU requirements; care should therefore be taken not to over-assess candidates.

The Environmental Science AVU may be used for the Sustainability unit, but centres would have to be very careful to ensure that what was done allowed the candidate to meet all the assessment standards for the unit, as there are distinct differences between the AVU requirements and the Sustainability unit Outcome 1 requirements.

#### Can the whole class do a similar investigation or does everyone need to choose something different?

There is no requirement for candidates to select from a range of investigative topics.
It is also acceptable for candidates to work in groups, providing the candidates are individually able to provide evidence that they have met the assessment standards.

#### I’ve developed my own investigation, recording car number plates and whether they’re LEZ compliant. Does this sound suitable at National 3?

You would have to ensure that the investigation has a scientific basis and allows your candidates to meet all the assessment standards for the unit.

#### Would a school litter survey be a suitable investigation?

Yes. The collection of waste and separation into different waste types (plastics, metal cans, paper etc) would be appropriate, and would provide data for the candidates to process to meet the assessment standards.

#### Our S3 pupils are investigating traffic and pollution through a tree lichen study. Would this be appropriate for a practical investigation?

Yes. [The OPAL: Citizen science air survey activities](https://www.imperial.ac.uk/opal/surveys/airsurvey/) (lichens on trees and tar spot fungus on sycamore) both provide a good foundation for the Outcome 1 investigation and could be adapted by level.

Further suggestions (including candidate examples) for Outcome 1 Sustainability investigations can be found in the following SQA documents:

* [N3 Environmental Science Sustainability Unit Specification](https://www.sqa.org.uk/files/nu/N3EnvironmentalScienceSustainabilityUnitSpec.pdf)
* [N4 Environmental Science Sustainability Unit Specification](https://www.sqa.org.uk/files/nu/N4EnvironmentalScienceSustainabilityUnitSpec.pdf)
* National 3 and National 4 Environmental Science Sustainability unit Assessment Support Packs ([SQA Secure](https://secure.sqa.org.uk/))
* [N3 Course and Unit Support Notes](https://www.sqa.org.uk/sqa/48589.html)
* [N4 Course and Unit Support Notes](https://www.sqa.org.uk/sqa/47424.html)

The following organisations also provide details of appropriate investigations. Many of the resources include teacher guides, learner guides, risk assessments, and other learning support materials:

* [SSERC](https://www.sserc.org.uk/) (Scottish Schools Education Research Centre) – the Environmental Science pages are under development, but some of the chemistry, physics, and biology practicals link well with sustainability issues. For example, measuring rates of photosynthesis (biology) links to climate change, while physics includes a section on how physics can improve the quality of life in developing countries.
* [STEM Learning](https://www.stem.org.uk/) – there are over 14,000 quality-assured digital education resources, including practical investigations.
* [OPAL: citizen science](https://www.imperial.ac.uk/opal/surveys/) – the Open Air Laboratories (OPAL) programme ran from 2007to2019. Although findings can no longer be submitted, survey support materials are still available for a range of outdoor investigations (water, air, biodiversity, bugs, tree health, soil and earthworms, pollinators).
* [Royal Society of Biology/Nuffield Foundation](https://www.rsb.org.uk/education/teaching-resources/secondary-schools) – the Secondary Schools Practical Biology webpage contains a range of experiments; some under the Environment and Technology tabs would be appropriate, though may have to be adapted for level.

### Outcome 2

#### Can you use Outcome 2 UASPs that have been prior verified and uploaded by the SQA from different centres?

Yes, however, currently there are no prior verified UASPs for the Sustainability unit.

#### Can we alter the Environmental Science UASP questions for the marked ‘test’? Would this need to be prior verified before use?

The UASPs published by SQA are sample sets of questions. Centres may use them unaltered or adapt them to meet individual centre needs. They may also be replaced with suitable alternatives of a similar standard. Centres should refer to the Unit Specification for advice on how to ensure that a replacement assessment meets the assessment standards for the SCQF level. Where questions have been replaced, it is recommended that the assessments is submitted to SQA for prior verification; this ensures that what they are asking is appropriate.

#### Are candidates only allowed two opportunities to pass Outcome 2?

Yes, except in exceptional circumstances when an additional re-assessment opportunity may be appropriate. SQA does not dictate what exceptional circumstances are, but failing an assessment twice should not be viewed as exceptional circumstances unless there was a reason for this, such as illness or bereavement.

If a candidate achieves less than 50% of marks available, they should be re-assessed using a different set of questions, of a similar standard. Candidates may be re-assessed across all key areas or only in key areas of the unit that they have not achieved.

#### What learning do we need to cover in order to prepare for the marked assessment, where the pupils need to achieve 50% to pass?

The following SQA documents provide guidance on what should be taught at each level:

* Sustainability Unit Specification
* Unit Assessment Support Pack
* Course and Unit Support Pack

These can be accessed via the [Environmental Science webpage](https://www.sqa.org.uk/sqa/45911.html).