

The EAC at 25 – Looking Forward: technical report

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Contributors: This summary is based on reports of the workshops produced by the chairs (Marta Arcos Garcia, Daniel Miles, Barney Sloane, Marjolein Verschuur) and rapporteurs (Rebecca Bennett, Jenni Butterworth, Agata Byszewska-Łasińska, Nina Glińska).

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Introduction

During the European Archaeological Council (EAC)'s 26th Annual Meeting in Gdańsk in March 2025, workshops were held to explore four key heritage management priorities identified by members in a [survey conducted in Brussels](#) the previous year, namely: the potential of citizen science, the challenge of heritage crime, the role of heritage and archaeology in landscape management processes, and the issues posed by climate change and the need for sector sustainability.

Around 100 EAC members and colleagues participated in the workshops. The four topics were discussed freely during each session, and the EAC offers its grateful thanks to all the facilitators and participants who made the workshops such a stimulating and interesting exchange.

The aim of the workshops was to inform EAC planning, not to provide a formal published output, but this document provides a general account of the discussions, priorities and key points raised, with reference to the Brussels survey. Reflections regarding the future actions which EAC might take to support its members in addressing the issues raised are provided from the EAC Board meeting in June 2025.

Summary reports of the workshops will be published by Internet Archaeology and Archaeolingua in 2026, and the links to these will be found on the [EAC website](#) when available.

Workshop summaries

Citizen Science

The Brussels survey showed that many EAC members are interested in developing methods for better enabling public participation in heritage management processes and promoting its benefits. The need to develop storytelling techniques and dialogue with other professions, the wider public and local historical groups to encourage community participation in archaeological decision-making was noted. Youth participation was raised as a specific need.

The particular topic of citizen science – the participation of the general public in archaeological investigation and other heritage management activities – was chosen for the workshops, to complement the [guidance already published by the EAC](#) on the broader issues in 2024. The workshops considered what practical steps heritage managers could take to promote citizen science, especially to young people. They also asked how citizen science research models can be used to increase public involvement in decision-making.

The need to explain what heritage managers do, and to provide open and accessible data to ‘demystify’ the change management process was noted. This is necessary to engage the public with the potential of citizen science and engage young people’s curiosity. However, there are sector training and capacity gaps regarding engagement and outreach skills that are a barrier to this.

For young people, greater understanding of what they value and want is needed to engage them more effectively. Embedding heritage and archaeology into school curricula and activities is a challenge, but piloting youth and citizen boards and assemblies to increase representation is a valuable option.

In addition, the potential of citizen science to contribute to heritage management needs to be promoted to professionals, to demonstrate its usefulness within authorised decision-making processes. A focus on the Faro Convention is desirable, to enable heritage managers to work more closely with heritage communities, and demonstrate heritage as an economic, cultural and intangible community asset.

Questions and reflections for EAC:

- Undertake survey of values to provide supporting evidence for heritage managers.
- Provide guidance and simple tools for local authorities, museums and other bodies on how to support effective citizen science, provide models and help frame questions.
- Find cross-disciplinary case studies and map what citizen science initiatives are already successful
- Promotion activities, convening of high level meeting to encourage collaboration and best practice.
- Look at use and promotion of the Faro Convention?

Heritage crime

Heritage crime is a common concern for EAC members, but there are sharp differences in the prevalence of different types of heritage crime and thus concerns across Europe. This is partly due to varying legal frameworks and enforcement strategies. However, the rise of conflict has had significant impact on the incidence of heritage crime in some areas and the ability of national and international agencies to combat it, and it presents specific risks.

The workshops noted that there is insufficient data to fully understand heritage crime rates, or rates of success in combating it. This makes it difficult to demonstrate the harm caused by heritage crime, or the value of combating it, to decision-makers. There are numerous barriers to effective enforcement and cross-agency, cross-border collaboration, and it is often seen as low priority. Although a number of legislative tools are available (e.g. Nicosia, Valletta and various UNESCO Conventions), understanding of their role is often low, and the legal tests for proving heritage crime are difficult to meet.

Looting and illicit trafficking are key concerns for some nations, but almost completely absent for others. There is not enough expertise regarding archaeology within, or coordination between, agencies for effective enforcement. Inability to identify objects or their provenance securely is a specific problem for combating archaeological crime.

Damage to monuments is a universal concern, whether arising from intentional targeting of heritage, or as an unintended consequence of more general vandalism. Unintentional damage, caused by lack of understanding of heritage vulnerability, particularly caused by tourism and online influences – e.g. trend for ‘adding to’ monuments – is increasing.

Metal detecting has varying legal status and reporting practice between nations, and the occurrence of illegal detecting varies enormously. Illegal detecting is linked to cross-border trafficking, risks are increased by conflict. However, legal metal-detecting can fall within citizen science and it is important to distinguish this and profile positive case studies. Used well, metal detecting can fill gaps in regional data and improve heritage protection outcomes.

The workshop did not consider the ethical and legal issues related to past heritage crime and colonisation, e.g. contested ownership of museum objects, but noted that EAC should possibly consider this as part of any initiative on heritage crime, as it is an important issue.

Questions and reflections for EAC:

- Do we demonstrate the harm caused by heritage crime or the value of combating it sufficiently to decision-makers?
- Explore the role of available international legislative tools, and consider why they are not better used? Is it possible to address this?
- Tools for better data collection- we do not have good enough quality data to establish of heritage crime is getting more or less prevalent, and what the most significant issues are.
- Collaboration across borders and with other agencies. How do we convince other agencies that heritage crimes are crimes worth enforcement?
- Need to be realistic about the degree to which there are resources to improve enforcement and legislation, so what are the most effective collaborations that EAC could encourage?
- Tools for better objects and provenance identification- can existing tools be adapted to archaeology, using materials and forms to assist in proving heritage crime?
- Influence behaviour- create tools for education, reporting, harness citizen science to reduce the causes and incidence of heritage crime. Consider the rewards and motivation for encouraging people to behave ethically.

Landscape management and spatial planning

Many EAC members are concerned that archaeology increasingly finds itself as one of a number of competing or complementary priorities during broader decision-making processes. In particular, the relationships between heritage management and pressures driven by sustainability or development needs were noted: not just those pressures themselves, but also the rate at which priorities are changing and the speed at which decisions are being made. Green energy and housing were identified as particular challenges.

Heritage is sometimes considered a 'hindrance' but is mostly served adequately in the planning system. However, much landscape change, such as mining, forestry or peatland restoration, lies outside spatial planning processes or is not well integrated into them. There is little quantification of the ongoing impacts of agricultural activities on landscape and heritage, and few means to mitigate impacts.

The importance of securing archaeology as a priority in landscape characterisation and change was noted. Heritage is often excluded, or an afterthought, in decision-making regarding landscape, particularly in activities such as nature restoration, and there are risks from inconsistent practice and lack of oversight or integrated approaches to landscape.

The European Landscape Convention could underpin the role of archaeology in landscape change but interpretation and communication of heritage aspects is needed to ensure it is effective. Good communication about definitions of nature and heritage, data about landscape change and positive, accessible messages about heritage significance are needed. The absence of commonly understood standards (unlike in natural environment sector) and good quality data and supportive materials is a barrier to effectively communicating the public benefit of heritage landscapes (rather than sites).

Questions and reflections for EAC:

- How do we make a case for heritage at the landscape scale? How to make the case for the heritage of a landscape?
- What are the principles of landscape management from a cultural heritage perspective?
- How can we better integrate cultural and natural heritage in decision-making around landscape change?
- Working examples of good practice from across the continent are needed.
- Understand and predict the drivers for landscape change to prepare the heritage response (proactive).
- Foster connection to other relevant EAC themes and discussions (climate change / sustainability).
- How do we communicate with the public and raise the profile of historic landscapes and the heritage of landscapes to wider public?

Sustainability and climate change

The Brussels survey showed that the concerns of EAC members fall into two related areas. Firstly, the need to improve sustainability in the sector and profession, and secondly, how to effectively and proactively manage heritage resources within a changing climate context. The workshops addressed these topics separately.

Environmental Sustainability

Initiatives to build in/consider environmental sustainability in archaeological working practices were highlighted, from grassroot staff initiatives addressing behaviour change, recycling and reduction in paper, working with green plant providers. Many were at individual or organisational level, and are not perceived as being consistent or sector wide initiatives, across member states or Europe.

Challenges fall into three groups: (1) The intellectual/philosophical challenge of balancing carbon considerations with the need to perform core activities underpinning the profession – archaeological investigations. This is exacerbated by the wider issue that initiatives to make European states more sustainable could have a negative impact on others, and environmental sustainability is associated with a wider global context that is far larger than the archaeological sector.

(2) Archaeologists are not environmental sustainability experts, thus there is a gap in knowledge and skills to understand what sustainability means for archaeological practice/sector. The challenge is how to fill these gaps, so that archaeologists can better understand how to build carbon considerations/environmental sustainability into the design and implementation of archaeological practice at all stages of the process – planning/design, set up of site, implementation, post excavation and archiving.

(3) Understanding the broader impact that building in actions to support carbon reduction/environmental sustainability has on archaeological practice and beyond. For example – changing from paper to digital (do we know what is the carbon footprint of digital archaeology and AI use within archaeology, how does it affect audiences?); changing from fossil fuel plant/machinery to electric/battery (new logistical issues, changes to work practice, cost increase, access to machinery); change to passive storage and archiving (how does it affect conservation, preservation and archiving practices).

Questions and reflections for EAC:

- Share good examples of approaches, demonstrations of good practice and actions from across the member states to make them more available.
- This could be done by a bank of case studies, producing guidance and E-Learning that could support building environmental sustainability into decision making (planning, designing, implementation) at all stages of the archaeological project cycle
- Consider risks/ detriment to the archaeological work required to fulfil environmental sustainability aims and goals.
- Forum/ focus to connect with the professional environmental sustainability sector to help us become a more sustainable profession.

Climate Change and the Archaeological Resource

The biggest challenge, but with biggest potential for knowledge exchange, was considered to be building an evidence base for the impact of climate change, and climate change mitigation measures, on the archaeological record. Related to this, the potential for archaeological work to become part of climate change adaptation schemes presented new professional and knowledge gain opportunities.

The different legislative frameworks across Europe, with climate change adaptation being planned at national, regional and in some cases local level – or not at all – produces inconsistencies in how the archaeological record is managed and impacted, particularly where climate change and the management of archaeological sites happens at different levels.

Another very important concern raised was the perception that archaeology is becoming less important to society in the context of the need to adapt to climate change – e.g. green energy infrastructure will provide more public benefit than that produced by archaeology. The impact of climate change means that more difficult choices are being made and archaeology is not part of the decision making process, and not well enough integrated with adaptation measures being implemented – ecology and the environment are seen as part of the solution (nature recovery), and there is concern that archaeology does not fit into that.

Climate change is a global issue and Europe needs to learn from, and work together with, the global majority/south on how they are approaching historic environment/archaeology management in this context. Also archaeology needs to work closer and better with other close sectors, e.g. ecology, natural environment organisations and bodies to provide more holistic solutions.

Questions and reflections for EAC:

- Making a case for archaeology as part of the climate change solution, particularly regarding green energy.
- The EAC could initiate a study across its members into how archaeology is managed within the individual climate change legislative frameworks, to identify common threads to support members.
- Building the climate change risk evidence base and dealing with loss: guidance or case studies – could a high level map of European climate change risk be produced?
- Guidance on scenario planning and how the process of loss can be managed (documented and decisions made). This could be an addition to the suite of Making Choices guidance – a decision framework for adaptation/loss/preservation.
- Showcasing the positive contribution that the past can make to a more sustainable future: case studies highlighting how environmental sustainability was managed in the past through reuse of materials, recycling and water management.

Workshop notes

Citizen Science

Chair: Barney Sloane. Rapporteur: Agata Byszewska-Łasińska

What do we mean by citizen science in archaeology?

Many obvious examples of amateur (ie non-professional) excavations. But limited examples on strategic platforms, eg:

- World Economic Forum newsletter: An amateur archaeologist has deciphered an early human writing system. He found that a lunar calendar was embedded in Ice Age cave paintings in Europe.
- EU Citizen Science Platform [WikiTopia Archives](#) is a program for digitization, transcription and study of archaeological sources run by the association [ArkeoTopia, an alternative approach to archaeology](#).
- University: Leiden Heritage Quest, Netherlands: More than 6,500 volunteers have supported the accurate identification of approximately 1,000 prehistoric burial mounds in the Netherlands in just four months, proving the value of involving volunteers in archaeology.
- Commercial archaeology and volunteers: Scotland: The Whiteadder archaeology project is a collaborative investigation into the archaeology and landscape history of the Whiteadder Water, one of the primary communication routes through the Lammermuir Hills, S Scotland.
- US National Parks Service: Citizen scientists are volunteers who help NPS archeologists to collect data for managing archeological resources. You can help! Here's how to find citizen science projects

What practical steps could heritage managers take to promote citizen science, especially to young people?

State level

- Explain what heritage managers do.
- Open our data for young people – address their curiosity.
- Gather information on what young people value and want – school surveys of kids. Teenagers difficult audience – debates to engage them (eg 8-9 schools) Community archaeology surveys – kids need hands on
- Explain the potential of what is possible in citizen science
- Funding, case studies, methods – project templates
- Try to get archaeology into curricula, esp secondary which is hard
- Practical physical projects
- Pull in stakeholders to plan school inputs Youth organisation Museums into process
- Projects for struggling children (qv Rejuvenate)

- Example: Adopt a monument – schools works for archaeology – timing of excavation. Belgium, Spain, Ireland. Graveyard surveys. Graveyard surveys – LA and archaeology Funding for 1 year placement into schools – driven by heritage side, regional funding

EAC opportunities

- Values survey, case studies, support for local archaeologists
- Guidance for local authorities how to do this.
- Copy nature watch models – provide models for heritage, helps frame questions

How can citizen science research models be used to increase public involvement in decision-making?

State level

- Clear public explanation of how change management process works
- Demonstrate Visibility of citizen science product Prove the usefulness of the citizen science to citizens in the authorised decision process
- Pilot 'youth board' parallel to authorised process. Citizen juries/assemblies. Citizen representation at the meeting
- Training Capacity gap in terms of engagement and outreach
- Focus on Faro Convention – do more with heritage communities, explain what people have on their patch Heritage as asset – economic, cultural focus for community activities intangible.
- Example: Evaluation of scoring model for future protection of sites – included local people. Voluntary.
- Example: Find a monument – public reporting. 1000s.
- Example: Local listing processes

EAC opportunities

- Cross-disciplinary case studies, mapping what already happens. Provision of guidance eg to local authorities
- Tool to help people in simple language for museums, local authorities
- Promotion of Citizen Science.
- International meeting of local leaders, collaboration. High level umbrella organisation.

Heritage crime

Chair: Marta Arcos. Rapporteur: Jenni Butterworth

Most common heritage crimes and concerns:

What is heritage crime? Does it matter?

- There is insufficient data to understand heritage crime rates, or rates of success in combating it. Quantification is an issue. Probably only understand the 'tip of the iceberg' in terms of both crime and enforcement.
- Do we demonstrate the harm caused by heritage crime or the value of combating it sufficiently to decision-makers? It is not regarded as a high priority. Individual cases are too small to invest in, international cooperation is lacking.
- Legal tests for proving heritage crime are difficult to meet, in particular UNESCO conditions are out of reach in many cases. Collaboration would help with this.
- Difficulty of proving provenance and object identity is a barrier to confirming heritage crime, particularly due to cross-border and conflict factors.

Metal-detecting

- Common heritage crime in some nations, almost completely absent in others. Illegal detection is present in places where detecting is both legal and illegal.
- Legal and practical approach to metal-detecting differs by nation, e.g. legal or mostly legal in some; completely illegal in others; illegal but with pragmatic reporting mechanisms in others; reporting requirements in some.
- Illegal detecting is linked to cross-border trafficking, risks are increased by conflict.
- Legal metal-detecting can fall within citizen science: programmes that work with metal-detectorists to encourage reporting, public benefit, ethical practice have been very successful. Important to profile positive case studies.
- Used well, metal detecting can fill gaps in regional data and improve heritage protection outcomes.

Looting and trafficking

- Anecdotally, common heritage crime in some nations, almost completely absent in others.
- Europol- do nations have effective enough cross-border arrangements about cultural heritage? Enforcement is often ineffective and expensive. Archaeology is not seen as high as a priority as art crime, because commercial values lower. Conflict zones increase risk of looting and trafficking, increase difficulties of enforcement.
- Not enough expertise regarding archaeology (as opposed to e.g. fine art or CITES) in relevant agencies. Not enough coordination between agencies.

Vandalism/ damage to monuments

- Intentional vandalism – either deliberately targeting heritage, or general vandalism with unintended consequences for heritage. Motivation varies, can be ideological (e.g. church burning).
- Unintentional damage, caused by lack of understanding of heritage vulnerability. Includes damage caused by tourism and online influences- e.g. trend for 'adding to' monuments (rock art, graffiti, padlocks etc).

- Damage to monuments within conflict zones.

Fakes and organised crime

- Archaeological fakes are problematic because archaeological objects are not unique (like fine art) so nature of crime difficult to prove.
- Legislation governing fakes varies by nation. Selling archaeological fakes is often not heritage crime, but fraud. Museums exhibiting fake objects is different legal problem.
- How is heritage crime organised, how does it relate to wider crime networks?
- Online marketplaces are a problem for selling archaeological fakes as well as artefacts.

Ethics and legislation

- Ethics and legislation related to past heritage crime and offences related to colonialisation, eg contested ownership of museum objects. The workshop did not consider this, but EAC should possibly consider this as part of any initiative on heritage crime, as it is an important issue.

Areas where solutions and improvements might be found:

International legislation

- Nicosia Convention: available tool, but not used enough- why is this? Is there too much conflict with national legislation to make it useful? Council of Europe has current push for signatories- useful to work with this.
- Decision-makers think Nicosia is too similar to existing UNESCO frameworks, don't use it.
- UNESCO and Valletta conventions are available tools, but decision-makers do not always understand how they can be used.
- Hoping for EU resolution on the topic in June 2025, but will cover import into EU only, not internal cross-border matters, but both forms of trafficking are an issue.
- Legal situation is complex and varies by nation, tied to concepts of use and ownership as well as heritage.

Collaboration

- Collaboration across borders and with other agencies. Educational work with other agencies to upskill them in identifying heritage crime. How do we convince other agencies that heritage crimes are crimes worth enforcement?
- Collaboration with non-EU countries is a particular aim, because provenance can be difficult to establish for areas where objects are trafficked from (e.g. Ukraine, Nile valley).
- Need to be realistic about the degree to which there are resources to improve enforcement and legislation, so what are the most effective collaborations that EAC could encourage?

Developing new tools to combat heritage crime

- Tools for better data collection- do not have good enough quality data to establish of heritage crime is getting more or less prevalent, and what the most significant issues are.

- Tools for object ID- can they be adapted to archaeology, using materials and forms to assist in proving heritage crime?
- Tools for provenance- Case study from Netherlands has been using sediment tests for identification.
- Influence behaviour- create tools for education, reporting, harness citizen science to reduce the causes and incidence of heritage crime. Consider the rewards and motivation for encouraging people to behave ethically.
- German example of monitoring ebay to remove illegal listings.

Landscape management and spatial planning

Chair: Marjolein Verschuur. Rapporteur: Rebecca Bennett

Connection to Spatial Planning

- Heritage is sometimes considered a “hindrance” but mostly served adequately in the planning system. However, much landscape change lies outside spatial planning processes or are not well integrated into them. Examples of this include: mining / extractive activities; forestry (illegal activities reported in RO); agriculture; peatland restoration (IE).
- No quantification of ongoing impact of agricultural activities on landscape, acceptance of agricultural practices with very few means to prevent activities that are identified as detrimental.
- Changing priorities & increased speed of decision-making are risk: e.g. green energy generation schemes (solar and wind farms) being fast-tracked through planning; pivot from supporting tenets of nature preservation that are “barriers” to strategic development e.g. UK escalating costs of wildlife preservation seen as barriers to infrastructure- how do we stop heritage falling foul of similar trends?
- Challenge of multiple organisations with oversight of landscape – leads to lack of coherent approach even within a country.
- Good practice examples around big infrastructure (e.g high speed rail in CZ, transport in EE) –what are the mechanisms that facilitate this and how replicable are they? How much does it rely on proactive outreach by heritage agencies? (EE)
- Assumptions about heritage impacts of bio-net gain – are they correct?

Heritage often excluded from conversations / decision making regarding landscape

- Variance in practice of Environmental Impact Assessments (EIA): some countries hold heritage as equal in the EIA process, some countries barely an afterthought (CZ).
- Lack of oversight and integration of disciplines (visual impact, nature, heritage) in the process, but value of this highlighted (IE). Lack of expertise / commitment to integration on behalf of those producing the EIAs a problem.
- Need to understand the impact of good / poor consultation of professional heritage advice at different scales of intervention / change e.g. local, regional, national.
- Examples of good practice of collaborative approaches to landscape management e.g National Trust (UK)

Importance of an integrated and strategic approach to managing landscape

- Need to move from reactive to proactive management.
- European Landscape Convention could underpin this but interpretation and communication of heritage aspects is needed to ensure consideration of “gaps between sites”.
- Consideration of drivers of change that are likely over the next decade e.g agricultural policy CAP, climate change, reforestation – how can heritage managers be ready for these?

Communication

- Review of the language used, SE notes official definition of landscape includes heritage and nature so no division / ownership of the term by one discipline
- “no such thing as a natural landscape”, reflect long duree of human impact on the landscape
- landscape as continually developing as a result of all sorts of forms of human activity combined with natural environments
- warmth of public perceptions around “farming” are a challenge eg use of solar “farms” not solar “factories”, does this lead to a general underestimation of the damage of on-going agricultural processes?
- how to ensure perception of heritage is positive not a barrier, how can heritage be “good news” (or at least less of a surprise)
- We have lots of data about landscape change, but not always well communicated. Landscape biographies (NL) used to communicate key concepts “story of the landscape” how a landscape came to be. Can we make our case for the heritage significance of the landscape more compelling and easily understood?

Nature “Restoration”

- Nature 2000 underpins approaches but does not explicitly mention cultural heritage.
- Consultation with heritage professionals often an afterthought to restoration schemes.
- Tensions over restoration e.g who pays for damage to archaeology during wetland restoration (SE)
- Some types of restoration seen as exclusively positive e.g. peatlands both environmentally but also socially (for example the jobs created as part of this process IE).

Data

- Inspire directive a useful tool but focus on sites not landscapes, how can we see landscapes integrated?
- No common or commonly understood standards (unlike in natural environment sector). This is needed to facilitate communication.
- Good quality data and supportive materials to demonstrate scale and significance.
- Make detailed heritage data available to all so “ignorance is not an excuse” (AT)
- AI how will this impact data processing and decision making will professionals be cut out of the process especially with push towards more rapid decision making

EAC Actions

- How to make a case for heritage at the landscape scale? How to make the case for the heritage of a landscape?
- What are the principles of landscape management from a cultural heritage perspective?
- How can we better integrate cultural and natural heritage in decision-making around landscape change?
- working examples of good practice from across the continent.
- Understand and predict the drivers for landscape change to prepare the heritage response (proactive)
- Foster connection to other relevant EAC themes and discussions (climate change / sustainability)
- How to communicate with the public and raise the profile of historic landscapes and the heritage of landscapes to wider public?

Sustainability and climate change

Chair: Dan Miles. Rapporteur: Nina Glińska

The two workshop sections were broken up into two themes:

- 1 Environmental Sustainability – what does this mean for archaeology
- 2 Climate Change – impact for the archaeological resource

1 Environmental Sustainability

Current Situation

Various initiatives highlighted by different members to build in/consider environmental sustainability/net zero into archaeological working practices. These include grassroot staff initiatives addressing changing behaviours, building in practical solutions about recycling materials, reducing paper, moving more digital etc, working more closely with green plant providers. There were lots of examples provide from the small changes to larger initiatives that are being undertaken in commercial/development led archaeology. However, these are often individual (staff, organisation) led and are not perceived as being consistent or sector wide initiatives, across member states or Europe.

Challenges

There are a mix of big challenges. These can be brought together in three groups:

- 1 Intellectual/philosophical challenges about the need to balance carbon considerations and actually undertaking what we do as a profession – archaeological investigations. There is the balance between what archaeological work needs to be undertaken to deliver its core functions – for example in a commercial setting – reducing risk and mitigation associated with developments, with the realisation that the profession needs to reduce its carbon emissions (most of which are associated with the practical work associated with its core functions).

There is also the wider philosophical backdrop of not just thinking about how EAC member archaeological sector (Europe, the Global North) can reduce its emissions and drive for sustainability at the detriment of others (for example the Global South) in terms of climate action, for example, what is the impact of moving towards battery powered plant and machinery. Our changes to become more sustainable could have a negative impact on others, and environmental sustainability is associated with the wider global context that is far larger than the archaeological sector.

2 There is a gap in our knowledge and skills to understand what sustainability means for archaeological practice/sector and how we can build in considerations as part of the design and planning of work. Archaeologists are not environmental sustainability experts (though there may be a broader basic knowledge of the environment than other sectors). The challenge is how to fill these gaps, so that archaeologists can better understand how to build carbon considerations/environmental sustainability into the design and implementation of archaeological practice at all stages of the process – planning/design, set up of site, implementation, post excavation and archiving.

3 What are the practical challenges of building in actions to support carbon reduction/environmental sustainability for the archaeological practice. Each change, will have an impact that needs to be considered. For example changing from paper to digital (do we know what is the carbon footprint of digital archaeology and AI use within archaeology); changing from fossil fuel plant/machinery to electric/battery (new logistical issues, (charging), changes to work practice, cost increase, access to machinery; the move to passive storage and archiving (how will that impact conservation and archiving practices), etc.....

Possible EAC support

A number of suggestions were made that could help support building in environmental sustainability into archaeological practice. There are good examples of approaches, demonstrations of good practice and actions from across the member states (eg who is doing what and what is this achieving) and there is a need to share these and make them more available. These could be brought together and made more available so that others could learn and use them. Various suggestions were made on how to do this that the EAC could support. These included creating a bank of case studies, producing guidance and E-Learning that could support building environmental sustainability into decision making (planning, designing, implementation) at all stages of archaeological project cycle – but importantly with the detriment to the archaeological work required to fulfil its aims and goals. Ultimately it is another part of the Making Choices suite of support. The last potential support is the need to connect with the professional environmental sustainability sector that could help us become a more sustainable profession. Attendees were interested in being involved to capture the different approaches across the EAC members and thinking about how to make this information available.

2 Climate Change and the Archaeological Resource

Current Situation

There were four main strands of this theme that were brought up by the workshop attendees:

- 1 Current concern for the physical impact of the effects of climate change on the archaeological record (including the measures being undertaken to adapt/mitigate that impact eg reforestation, flood defences)
- 2 Current initiatives that were being undertaken to identify, map and evidence the impact of and risk of climate change on the archaeological record

- 3 Changes to legislation or approaches to include impacts of climate change in local plans or in approaches to things like preservation in situ
- 4 Thoughts on how archaeology can be used to showcase the impact of climate change and how it was mitigated in the past

Examples of these were given by the workshop attendees, for example the increased risk of flooding in Austria due to the melting glaciers; Discovery Programme mapping of heritage sites at risk due to the impact of climate change in Ireland; changing approaches to preservation in situ and implementing scenario based planning for shipwreck preservation in the Netherlands.

Challenges

There was a considerable number of challenges that were brought up in both workshops around the impact of climate change on the archaeological record and how this was being mitigated/adapted against.

- 1 Understanding the impact of climate change on archaeology

The first challenge raised was to do with building the evidence base for the impact of climate change on the archaeological record – how were different members approaching this through data collection, mapping and modelling. Both Ireland and the Netherlands gave examples of their approaches (mapping heritage sites at risk and developing shipwreck preservation scenarios) and spoke about the complexities involved in the approaches – for example modelling different climate change scenarios (+5%, +7% increase rainfall etc). This understanding was on the direct impact of climate change eg flooding in Austria to the risks associated with the schemes being designed to adapt to climate change.

- 2 The physical impact on the archaeological record

Many believed that the biggest challenge (and opportunity to knowledge gain) was from the initiatives being developed across the EAC around adapting to climate change impacts, for example flood defences, replanting etc.. and the unintended consequences that this could have on archaeological sites. Conversely this would also provide an opportunity to increase archaeological work (jobs plus knowledge gain) with archaeology becoming part of climate change adaptation schemes. This is as part of works, for example alleviate flooding or if waterlogged sites are drying out and cant be preserved then excavation is the only answer, which provides a great opportunity for knowledge gain.

Associated with this was the different legislative frameworks across the EAC with climate change adaptation being planned at national, regional and in some cases local level – or not at all. This has caused issues, for example in Spain, with different regional approaches impacting on how the archaeological record is managed as part of these green infrastructure and adaptation schemes. In addition legislation on climate change (a priority) is often at a national level (eg Germany and Austria) whilst the management of archaeological sites is in local planning/plans. There was also concern raised (the Netherlands) that sometimes a blanket approach was being taken which needed a more nuanced approach. There is a need to understand better how climate change and archaeology fits across the legislation in the different EAC member states.

- 3 Reduced importance of archaeology to society

Another very important concern/challenge raised was the perception that archaeology is becoming less important to society in the context of the need to adapt to climate change – the need for green energy infrastructure will provide more public benefit than that produced by archaeology. The impact of climate change means that more difficult choices are needed

and archaeology is not part of the decision making process. It is not seen as part of the delivery of green power and infrastructure. This is also in the wider context of food insecurity and the wider infrastructure and growth agendas being seen across Europe. There was also the perception that archaeology is not as important as ecology in terms of the adaptation measures being implemented – ecology and the environment are seen as part of the solution (nature recovery), and there is concern that archaeology does not fit into that.

4 European archaeology cannot solve these issues alone

There were two strands to this challenge. The first being that climate change is bigger than Europe it is a global issue and we need to learn from and work together from the global majority/south on how they are approaching historic environment/archaeology management in this context. And the second one is that we cannot work in isolation – we need an allied approach and need to work closer and better with other close sectors, eg ecology, natural environment organisations and bodies to provide more holistic solutions.

Possible EAC support

There was consensus that the EAC could support member states with a number of the challenges highlighted. These included:

1 Making a case for archaeology as part of the climate change solution

This was in particular focused on the current challenge around making a case that archaeology is part of the move towards green energy.

2 Understanding how archaeology is managed within individual EAC member climate change legislation

The EAC could initiate a study across its members into how archaeology is managed within the individual climate change legislative frameworks. This would be useful to understand different EAC states situation, approaches to archaeology management and climate change and could identify common threads to support those members that may be behind in this issue. This could support 1 above.

3 Building the climate change risk evidence base and dealing with loss

Potential guidance or case studies highlighting how member states are assessing the risk to the archaeological record through mapping climate hazards and risks. Could a high level map of European climate change risk be produced?

There is also the need to produce guidance on scenario planning and how the process of loss can be managed (documented and decisions made). This could be an addition to the suite of Making Choices guidance – a decision framework for adaptation/loss/preservation.

4 Showcasing the contribution that the past can make to a more sustainable future

Potential case studies could be produced to show what archaeology can contribute to in terms of learning from the past. This could be highlighting risks to sites, but more importantly how environmental sustainability was managed in the past through reuse of materials, recycling and water management, for example. Examples of how archaeology can show evidence of past climate change impacts and how they were managed is a positive move for the sector.

Environmental Sustainability

Current situation	Challenges	Possible EAC support
Examples of initiatives Active paper reducing (Austria) Move towards digital only publication (Germany) Move towards passive archiving Global strategy in Spain – including monitoring and guidelines to implement landscape scale archaeological works There is becoming more awareness on sustainability in commercial archaeological companies (Netherlands) Commercial companies working with green plant suppliers developing a supply Framework (Netherlands) Individual archaeologists have set up the grass roots Archaeology for the Future group (Netherlands) Sustainability in museums has been going a while – reusing materials, exhibits etc – good examples of reuse and repurposing	Examples of challenges Issue of long term paper documentation storage AI and big data/archives are positive step forwards – but what is its carbon footprint? There is a concern over the hidden impact of digital technology (carbon, natural resources, energy use etc) Digital is the way forward but we need to know the full picture of the digital carbon footprint Practical issue of moving to passive archive storage in traditional buildings (costs, changes required etc) Solar panels in old/historical buildings – harm v green energy E charging infrastructure of site/survey vehicles Cost of new electric vehicles Global concept about the balance – trying to improve our carbon footprint but not to impact on other areas (eg lithium mining or detriment to the archaeological record) The balance between environ sust and doing the job – we need to consider the environ impact but not impede the work we do. Sustainability is a balance between what we are losing and what we are winning/gaining... The way to manage the carbon footprint is about better decision making and finding solutions The awareness of what is the meaning of environmental sustainability for archaeology We are archaeologists and not environmental sustainability professionals – how can we learn about env sus, can we cooperate with other professions?	Building a bank of case studies Egs of initiatives – who is doing what and what is this achieving Demonstrating good practice and ideas from across the members states – a way to share Guidance on how to build in environmental sustainability into decision making – planning and designing archaeological work Support to inform decision making on considering environ sust and undertaking the work – how do we embed environ sust into practical considerations without the detriment to the archaeological work required to fulfil aims/goals E- Learning on selection of digital data, archives What do we need to become a more sustainable profession (cooperation/support with sustainability managers)

Climate Change

Current situation	Challenges	Possible EAC support
Physical impact on archaeological record – sites and objects/materials Melting glaciers (Austria) increased reports and risk of flooding – risk to heritage sites and other effects eg chemical impact on ceramics Netherlands – increased risk to shipwrecks and therefore having to implement shipwreck scenario planning for protection/conservation Evidence gathering phase – understanding risks, mapping sites at risk, how to mitigate and what guidance can be produced to support archaeology through the climate change era Ireland – Discovery programme mapping heritage sites at risk (250,000 sites) Coastal erosion projects – risk mapping In a response to climate change (adaptation to CC impacts) the Netherlands is changing local plans including archaeology Netherlands rethinking about preservation in situ of sites Potential to show through archaeology egs of past sustainability/reuse... Replanting trees has negative impact on archaeological sites (England) Westerplatte site – an interesting eg of WW2 archaeology could be interesting for young people – teaching about past and future at the same time	The solutions to some aspects of climate change – adaptation initiatives eg flood defences, replanting etc may have an unintended but significant impact on the archaeological remains. This often is a blanket approach – general solutions – rather than thinking about an individual approach that takes into consideration the individual aspects of a site at risk etc... Archaeology is perceived as less important to society – impact of CC means that more difficult choices are needed and archaeology is not part of the decision making process Food insecurity and impact of industry and impact of archaeology Challenge for archaeology and society – “smart game” – what would you give up/lose in cultural heritage – increased focus due to CC adaptation Positive(?) archaeological work as part of climate change adaptation provides an opportunity to learn more – archaeological work as part of schemes plus need to excavate flooded sites if they are drying out. Climate change is bigger than Europe it is a global issue – we need to learn from the global majority on how they are approaching management of archaeology We can't do it on our own (archaeology sector) we need to join allied forces – other natural, environmental protection/bodies eg soil/nature Legislation in different countries is different with respect to climate change – in some countries there no planning considerations or climate change. Need to understand the broader context General solutions not always good (individual approach)	Making a case that archaeology is part of green energy Case studies to show that archaeology learns how it was in the past and how to use our knowledge in the future – egs of recycling, water management etc... How to document the process of loss How to map climate change risk to the archaeological record Inf/guidance on making choices associated with climate change – loss and scenario planning European map of climate change risk ? Build on the making choices suite of guidance – a decision framework for adaptation/loss/preservation Need to look at individual members/states to understand what members approaches are and to identify common threads to support those members that may be behind in this issue

Examples of reuse of material things eg shoes in medieval times	The responsibility for climate change initiatives/archaeological work is at a regional level (Spain) rather than a national which creates issues around consistency of approaches and differing proposals. Archaeology is deemed as not so significant as ecology in terms of impact of climate change and measures to mitigate/adapt to it. Archaeology is not seen as part of the delivery of green energy infrastructure How to manage the loss of archaeological sites The difference between decision/plan making between climate change adaptation and archaeological management is at different scales and priorities. Germany/Austria national legislation on climate change which is a priority But the management of archaeological sites is in local planning/plans Need to include how to manage natural disasters at the local plan level Eg of La Palma in the Canarias	
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Reflections

This is a working document, reporting Board responses (June 2025 Board meeting) to the Questions and Reflections contained in the Looking Forward workshop notes.

Questions and reflections for EAC:	Board discussion:
Citizen Science	
• Undertake survey of values to provide supporting evidence for heritage managers. • Provide guidance and simple tools for local authorities, museums and other bodies on how to support effective citizen science, provide models and help frame questions. • Find cross-disciplinary case studies and map what citizen science initiatives are already successful. • Promotion activities, convening of high level meeting to encourage collaboration and best practice. • Look at use and promotion of the Faro Convention?	• Survey of values: big task, nebulous, difficult for EAC to achieve. • Citizen science toolkit: practical, possible product, but needs consultation with each state. • Mapping of activities: appealing product, similar to previous EAC surveys. • Promotion: EAC can recommend this, but it a state-level activity. • Address Faro Convention: hard to know what EAC can do here. Board agreed that EAC has not finished its work on this topic- in the workshops, members were asking for more materials. Primary requests are for (1) clear messages to show to decision-makers, and (2) practical guides and examples to help heritage managers improve practice. • First task is to decide what the outputs are (working group, conference etc). This is potentially a lot of work, so it needs someone or some people who are prepared to drive the process first. • Action: EAC to send out workshop notes and these Board recommendations with a call for interested persons.

Heritage crime	
• Do we demonstrate the harm caused by heritage crime or the value of combating it sufficiently to decision-makers? • Explore the role of available international legislative tools, and consider why they are not better used? Is it possible to address this? • Tools for better data collection- we do not have good enough quality data to establish of heritage crime is getting more or less prevalent, and what the most significant issues are. • Collaboration across borders and with other agencies. How do we convince other agencies that heritage crimes are crimes worth enforcement? • Need to be realistic about the degree to which there are resources to improve enforcement and legislation, so what are the most effective collaborations that EAC could encourage? • Tools for better objects and provenance identification- can existing tools be adapted to archaeology, using materials and forms to assist in proving heritage crime? • Influence behaviour- create tools for education, reporting, harness citizen science to reduce the causes and incidence of heritage crime. Consider the rewards and motivation for encouraging people to behave ethically.	• Action: The Altamira symposium is the primary EAC action. It will explore these themes and follow on actions will be considered after that.

Landscape management and spatial planning

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| <ul style="list-style-type: none"> • How do we make a case for heritage at the landscape scale? How to make the case for the heritage of a landscape? • What are the principles of landscape management from a cultural heritage perspective? • How can we better integrate cultural and natural heritage in decision-making around landscape change? • Working examples of good practice from across the continent are needed. • Understand and predict the drivers for landscape change to prepare the heritage response (proactive). • Foster connection to other relevant EAC themes and discussions (climate change / sustainability). • How do we communicate with the public and raise the profile of historic landscapes and the heritage of landscapes to wider public? | <ul style="list-style-type: none"> • EAC can tackle defining the principles of landscape management from a cultural heritage perspective and providing working examples of best practice to provide an output which meets the first point: making the case for heritage at the landscape scale. • Difficult topic because of broad scale and the lack of useful definitions, but urgent at due to current risks, including green energy infrastructure. • Potential overlaps with previous or current work are an issue with this topic, e.g. significance and research framework groups, potential work on climate change or citizen science, previous symposium topics. <p>Board agreed that there is a need to broaden understanding about the scale of protection at landscape level, and EAC can address this.</p> <ul style="list-style-type: none"> • Two potential areas for EAC work, (1) advocacy around the headline message and (2) technical help with definitions and practice. • Action: There is already an EAA/ EAC working group on a related topic (Farming, Forestry and Rural Land Management), so any future action should consider whether reconfiguring or expanding the terms/ outputs of the existing group is a solution. • Action: EAC to talk to future Annual Meeting hosts to see if this topic fits their aims. |
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Sustainability and climate change

Sustainability

- Share good examples of approaches, demonstrations of good practice and actions from across the member states to make them more available.
- This could be done by a bank of case studies, producing guidance and E-Learning that could support building environmental sustainability into decision making (planning, designing, implementation) at all stages of the archaeological project cycle
- Consider risks/ detriment to the archaeological work required to fulfil environmental sustainability aims and goals.
- Forum/ focus to connect with the professional environmental sustainability sector to help us become a more sustainable profession.

Climate Change and the Archaeological Resource

- Making a case for archaeology as part of the climate change solution, particularly regarding green energy.
- The EAC could initiate a study across its members into how archaeology is managed within the individual climate change legislative frameworks, to identify common threads to support members.
- Building the climate change risk evidence base and dealing with loss: guidance or case studies – could a high level map of European climate change risk be produced?
- Guidance on scenario planning and how the process of loss can be managed (documented and decisions made). This could be an addition to the suite of Making Choices guidance – a decision framework for adaptation/loss/preservation.
- Showcasing the positive contribution that the past can make to a more sustainable future: case studies highlighting how environmental sustainability was managed in the past through reuse of materials, recycling and water management.

- Board feels this is a difficult topic to know what EAC can usefully do. Many elements relate to skills and broader issues which are not within the control or expertise of the heritage sector.
- Possibly the most useful EAC action on sustainability is to point to existing resources and good examples elsewhere.
- Hard to imagine whether a survey on some of these issues can be effectively answered by EAC members, or if EAC members can effectively advocate to decision-makers.
- Some of the urgent issues can be addressed under other topics, e.g. impact of green energy infrastructure is a landscape management issue.

Board feels further work is needed to define what effective EAC work could be done on these topics, and how that work would interact with work to address other themes.

- **Action:** Board to ask the working groups to think about the overall framework they work in and how their activities interact.
- **Action:** scope out potential work of Landscape Management group first, and discuss with potential drivers of this work group, to define areas of action.