

CITIZAN'S PLEDGE CRITERIA

Climate change is affecting coastal communities on a local level and causing changes that the CITIZAN team witness first-hand. While coastal erosion through sea-level rise and increased storm frequency are visible in the exposure of archaeological features, the ecology of intertidal areas and the economies associated with them are also changing, forcing communities to find new ways to reconnect with their environment and come to terms with damage and loss.

As archaeologists, evidence and stories of environmental change and impact across human settlements and landscapes has long been a familiar reality. However, today, the world faces the challenge and existential threat of the climate crisis, which is without a doubt unprecedented. Exposure to the scale, scope, and speed of the climate crisis is widespread, with billions of people around the world needing to manage risks of extreme events and disasters, and adapt in a way they see fit. As a society, and sector, we need to change our value-systems to prioritise awareness of how we each impact our wider environment. We also need to prioritise maintenance, repair and reuse of all material in general, as *everything* has embodied carbon, and has a role to play in resource efficiency. These changes come off the clear evidence which states that fossil fuels are the main source of Green House Gases contaminating our lives, and that our existing dependence on fossil fuel consumption through material and practices is the leading cause of the crisis we are in. Not only do GHGs lead to an ecological breakdown, they are also pollutants which are putting people's health and lives at risk.

CITIZAN's work with local communities around the English coast is valuable to enhancing our understanding of climate change. We recognise the importance of learning from those most exposed, at risk and vulnerable to the impacts of climate change and work together with them to better understand the local experience.

CITIZAN pledges to take measures to maximise our resource efficiency, and be accountable for the negative impact we can have on the environment.

Energy Efficiency

Turning off personal electrical equipment

CITIZAN will turn off personal electrical equipment not in use for more than one hour.

Energy saving is a simple yet impactful action you can take to reduce your carbon footprint. Leaving your electricals on standby wastes energy and increases emissions pointlessly. The simple act of turning off one single computer for the night reduces the machine's CO₂ emissions 83%, to just 63 kg a year.

Use of environmentally -friendly suppliers

CITIZAN will move towards suppliers that are conscious of their own environmental impact.

There are many suppliers who are moving towards more environmentally-friendly services and resources. Low-carbon energy generation could reduce emissions by 79%, saving 1.25 tonnes of CO₂ per year for the average home. Transferring to a green energy supplier that consistently generates enough renewable electricity themselves to match customer use, or buys the equivalent directly from generators is a high impact change to move towards net zero.

Recycling, reuse and repurposing of appliances

CITIZAN will research how best to repurpose items and endeavour to do so, before disposing of them.

The average estimated carbon footprint of a laptop is around 422.5 kgs of CO₂ equivalent, which includes the carbon emissions during the production, transportation and first 4 years of use. Just one iPhone X will create 79kg of CO₂ in its lifetime, roughly the same as burning 9 gallons of petrol. And that is prior to leaving the factory.

Recycling, reusing and repurposing appliances not only reduces waste and carbon footprint, but helps move away from excessive consumption. It also enhances awareness of digital/technological divides and poverty, encouraging action for more maintenance and repair, including handing over usual appliances to those in need.

Reduce archives stored on servers

CITiZAN will advocate for change in how we store our archives and on which servers

The average server will consume between 500 and 1000watts of electricity an hour. If the average use is 850 watts per hour, multiplied by 24 that equals 20,400 watts daily, or 20.4 kilowatts (kWh). Multiply that by 365 days a year for 7,446 kWh per year. A simple step is to transfer our servers to a more environmentally-friendly server but also to clean up our content/archives stored on servers to make sure we are efficiently storing digital archives.

Consumption and Waste Reduction

Reduce food waste

CITiZAN will be more conscious of food planning for team meetings, activities and events to avoid waste.

One third of GHG globally comes from agriculture, and 30% of the food we produce is wasted. Growing, processing, packaging and transporting food all contribute to climate change. In the UK, that amounts to over 7 million tonnes of food wasted each year. Food waste is a huge contributor to anthropogenic climate change, but also ethically problematic in terms of global poverty. A simple action is to be more conscious of meal plans, and consider how leftover food can avoid the bin!

Reduce promotional giveaways

CITiZAN will reduce future promotional giveaways.

Promotional giveaways are ideal for profile raising, branding, and saying thank you to our volunteers. But a lot of it can easily end up in the bin. Thoughtful consideration towards the fact that *all* material items have 'embodied carbon', as in produces GHG emissions during its production, we need to start being more aware of what we consume based on how it is produced.

Reduce excess packaging

CITiZAN will be mindful of how to practice smart packaging.

Packaging is also often sent to landfill as it can be difficult to recycle. Most products with excess packaging could use less packaging, or smarter

packaging, such as recyclable material, to give the same amount of protection. By using minimal packaging and reusing existing packaging, we can help reduce pollution and draw awareness to excess packaging as the problem it is.

Promote the Five R's Hierarchy

CITiZAN will promote the Five R's in their work practices.

By following the 5 R's hierarchy, organisations should consider four actions prior to 'recycling': refuse, reduce, reuse and repurpose, repair, and then recycle. *Refuse* is the first step towards a zero-waste system, which is to withdraw or limit support of items that post a waste problem and thus damaging to the planet. It mobilises the power of the consumer to encourage companies to reduce and improve their wasteful practices. *Reduce* our dependency and use of harmful, wasteful, and non-recyclable products. *Reuse and repurposing* are an important and creative actions towards sustainable lifestyles, and involves a stage of thinking how we, or others, might use or benefit from any item. *Repair* what can be fixed before disposing of it. *Recycle* is the most environmentally friendly waste disposal method.

Plastic Minimisation

Cut out plastics

CITiZAN will cut out plastics where possible from their work activities.

Single-use plastics are now part of our everyday life and is central to a "disposable" culture, yet are hugely problematic for the environment, and the health of all life. Plastics break down into microplastics, which are found everywhere including in soil, air, water and living organisms. Evidence shows microplastics have negative effects on vulnerable eco-systems (e.g. coral reefs, deep seas, polar regions), biodiversity (all marine life from plankton to large marine mammals) and human health. This includes microplastics now found in the placentas of unborn babies! Moreover, the economic impact on terrestrial and marine ecosystems due to the release of plastics into the environment is vast. The use of plastic has been normalised by consumers, particularly in using items

once and then throwing them away. It is essential to replace all single-use items including eating utensils, Styrofoam cups, water bottles, and paper plates with compostable or reusable alternatives.

Restore environmental wellbeing

Support local suppliers

CITiZAN will support local suppliers and communities whenever possible.

Local sourcing can benefit the environment and help reduce overall carbon footprint. Often, however, it is important to assess the entire life cycle of product and not assume it is environmentally more sustainable. While local suppliers may help reduce carbon miles as it uses less transportation, it may not always be the case.

More importantly, CITiZAN wants to support local businesses, farms and communities. Local businesses are more invested in local communities, and helps support the local economy, create local jobs, add character to the area and encourage more opportunity.

Promote vegan catering at all meetings and events

CITiZAN will only purchase vegan and/or vegetarian catering for all meetings and events.

Evidence suggests veganism has the smallest carbon footprint, generating a 41.7 percent smaller volume of greenhouse gases than meat-eating diets. Carbon food-prints can be reduced by a quarter just by cutting down on red meats such as beef and lamb. The carbon footprint of a vegetarian diet is approximately half that of an individual includes meat in their diet.

Use eco-friendly products

CITiZAN will think and research products before purchasing to ensure we can be as eco-friendly as possible.

It is worth to also consider investing in items of quality that robust and durable, rather than disposable due to cost.

Support peat restoration

CITiZAN will support peat restoration through our work, and through team away-days when possible.

Wetlands are wonderful! They are one of the most effective natural carbon sinks on the planet, but also deliver other ecosystem services such as: improve water quality and water supply, support flood control, protect from severe weather, home rich ecosystems and support biodiversity and more.

Advocate heritage for Climate Action

CITiZAN will share our expertise to advocate the relevance of how understanding archaeology and heritage can help towards Climate Action.

Heritage studies and its management has a critical role to play in enhancing our understanding of past climate changes as well as future credible solutions for sustainable practices and management. We can contribute to climate change mitigation, adaptation and resilience. Understanding past environments, particularly from a society/communities' perspective, is central to how we undertake climate action.

To name a few, this includes: creating a positive relationship to how people feel about where they live, having a stronger sense of place, and higher levels of social capital; understanding and management of landscapes - which includes understanding the historic environment - to help with aspects of environmental sustainability such as supporting woodland creation (via understanding regional tree species); identifying hedgerows which are important for biodiversity, valuing traditional land use/practices and/or supporting community stewardship; encouraging the use of use of heritage through repair and reuse of existing buildings as key to working towards a low carbon economy; understanding materials and circular economy of historic buildings and or traditionally buildings and the skills needed to maintain them.

The CITiZAN team are Carbon Literacy Project certified.