

**Follow up questions from the TCPA's Green places, successful places webinar:
How the Natural Environment can help combat climate change?
27/05/2020**

1. What basis is being used to give monetary values to emissions avoided?

We use the UK Government's Department for Environment, Food and Rural Affairs¹ value for the social damage costs of air pollution, to estimate the benefits of trees to air quality.

For carbon emissions avoided, we use the Department for Business, Energy and Industrial Strategy (BEIS) value for non-traded carbon to estimate the value of the carbon sequestered and stored in the tree. This value is found in the carbon pricing and sensitivities tables from BEIS which were published in 2017.² Along with traded-carbon, the non-traded value seeks to place a value on the emissions avoided through the services those trees provide, i.e. the reduction in the greenhouse effect of CO₂ over its atmospheric lifetime.

In our case, the value is non-traded as that is the sector that tree planting/management would fall into, as it is outside of the EU emissions trading scheme. The values and reasoning are set out in the UK Government Greenbook supplementary guidance.³

2. I like the way Anna provided a comparison between pollution interception and the number of vehicles. That is very useful to convey the message to the general public. Does Anna have an equivalent comparison between carbon sequestration by the trees and the carbon emissions of vehicles?

We did not use a specific example in our report for carbon and vehicles. We only used the comparison to the average carbon footprint of a UK citizen⁴.

Comparison to other values, such as vehicle emissions can be worked out, for example, using the UK Government website⁵, where you can enter vehicle information to find out the emissions of specific cars. If you can decide on an 'average' car you would like to use, then you can use this calculation. These numbers are often expressed in a precise way but they are estimates and need to be interpreted carefully.

3. Which have you found as the most useful measure for getting support for your tree ambitions: increase in numbers of trees or increase in canopy cover?

The short answer is it depends on the context and scale.

We tend to use canopy cover to help people visualise the tree planting challenge ahead. This unit of measurement can be used to reflect the calculations made by the Committee on Climate Change.⁶

In some circumstances, individual trees and tree numbers are useful. We find that some of the natural capital valuation tools used for measuring the ecosystem services provided by trees are helpful for gaining support for individual, or groups of trees. i-Tree⁷ is helpful for demonstrating the contribution of trees to the physical environment, and we find CAVAT⁸ to be helpful for demonstrating the aesthetic and cultural value of the trees.

We have demonstrated in our research that trees hold an enormous value to the public in terms of their amenity and aesthetic values. When we work with community groups and speak to the public, we find that people are really passionate about the value that trees bring to their community, particularly when they have memories of the tree or where the trees are

related to special events or people and so CAVAT values can be helpful for getting support for our ambitions.

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