

Stinsford Parish Council

Climate and Ecological Emergency Strategy and Action Plan

[Stinsford Parish Council, version 2.2 agreed on 12 October 2021 and updated on 8 August 2022]



A rainbow on Waterston Ridge, courtesy of Sarah Jane Pattison

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Part I: Declaration of a climate and ecological emergency

1. What we know about the climate system and the state of our ecosystems

1.1 Human influence on the climate system is unequivocal (IPCC, 2021). Increased greenhouse gas concentrations in the atmosphere are causing the climate to change.

1.2 Global

1.2.1 The *State of the Global Climate* provisional report published by the World Meteorological Organization in October 2021 states that the average global temperature in 2021 was about 1.1°C above pre-industrial level (WMO, 2021). This warming is leading to rising sea levels. On a global scale we are also seeing changing seasons, an increased range of pests and diseases, more heatwaves, more intense rainfall and flooding, droughts, stronger winds and more intense storms (IPCC, 2021 & 2022). Climate change is already impacting nature, lives and livelihoods globally, nationally, regionally and locally and the Intergovernmental Panel on Climate Change (IPCC, 2022) makes clear that every bit of further warming will make a difference.

1.2.3 Globally there has been an unprecedented decline in ecological diversity over the last 50 years. The seventh meeting of the Intergovernmental Science-Policy Forum on Biodiversity and Ecosystem Services produced its Global Assessment Report in 2019 which stated that nature is declining at a rate unprecedented in human history. This is seen as leading to the collapse of ecosystems on which we all depend and called for 'transformative change'. It was found that there has been at least a 20% reduction in land-based species since 1900, approximately 10% of species are at risk of extinction and 680 vertebrate species have become extinct since 1900. Three quarters of land based environments have been altered by human engagement. More than a third of the world land is under use for cultivation and urban areas have more than doubled since 1992. The World Wildlife Fund produced the Living Planet Report, 2020: Bending the curve of biodiversity loss. This charts a similar story of decline in biodiversity and argues that biodiversity is crucial for human self-preservation.

1.3 United Kingdom

1.3.1 The record-breaking UK heatwave of 18-19 July 2022 where, for the first time in the UK, temperatures exceeded 40°C was made at least 10 times more likely by human-caused climate change (World Weather Attribution service).

1.3.2 Future impacts depend to a large extent on future greenhouse gas emissions and warming. However, the Met Office Hadley Centre (UKCP 2018) tells us that, on average, UK winters are projected to become warmer and wetter, summers are likely to become hotter and drier. By 2050 heatwaves like the one experienced in 2019 are expected to happen every other year. By 2070 the Met Office projects:

- Winters will be between 1 and 4.5°C warmer and up to 30% wetter.
- Summers will be between 1 and 6°C warmer and up to 60% drier.

1.3.3 Heavy rainfall is also more likely. Since 1998, the UK has seen seven of the ten wettest years on record. The winter storms in 2015 were at least 50% more likely because of climate change.

1.3.4 The Royal Society for the Protection of Birds has provided data to suggest that more than 40 million birds have disappeared since 1970 (RSPB, 2020, A Lost Decade for Nature}. The World Wildlife Fund's, State of Nature Report 2020 found that 41% of UK species are in decline and 133 species have been lost since 1950. Of considerable concern is that species have also declined in National Parks, AONBs and SSSIs. Much of the decline is seen as a result of agricultural practices and insufficient protected areas. The UK was seen as having one of the worst records for ecological diversity in the developed world and drastic action is required to address this. The Environment Bill requires a 10% net gain in biodiversity.

1.4 Dorset

1.4.1 Dorset Council declared a Climate and Ecological Emergency in May 2019 and progressed to publish its strategy and action plan on 15 July 2021. The **Dorset Council Strategy** outlines areas where action is possible. While many of these themes can be translated directly into local action in Stinsford Parish, as demonstrated in our action plan, it must be recognised that others such as the requirement of 19,000 acres of solar (p.25) are unlikely to be appropriate due to the important ecology, landscape and heritage assets in the parish.

1.4.2 The **ecological impacts** identified by the Dorset Council Strategy are identified only through declining insect pollinators and the impact of this on sectors of the agricultural economy (p.15). The draft strategy states that 'Dorset is a relatively wildlife-rich county' (p.14) but fails to provide any data to support this statement.

1.5 Stinsford

1.5.1 And in the parish of Stinsford will not escape these impacts: We know that floods, storms and extreme heat can affect peoples' health and wellbeing as well as cause damage to homes and business premises and disrupt transport. Farming will be affected by climate change.

1.5.2 Stinsford Parish is fortunate to have a number of **natural woodlands** in its boundaries, notably Greys Wood and Thorncombe Wood and the Stinsford Water Meadows SSSI. It also benefits from a **small area of heathland** subject to long term restoration. A large part of the parish was chalk grassland. The Dorset Climate and Ecological Emergency Strategy identifies Dorset as losing 71% of this habitat between 1946 and 2002. The figure will be even higher in Stinsford where most chalk grassland has been subject to changing agricultural practices from 1970 onwards. Also, agricultural practices have disrupted wildlife corridors.

1.5.3 The Stinsford Neighbourhood Plan 2021-2038 (Section 3 The Natural Environment and Appendix 1) presents a detailed picture of **the ecology of the parish**. The first part of Appendix 1 clearly identifies the rich diversity of habitats in the parish. It then moves on to list species present in the parish although the bird list focuses on one area, Bhompston. As a result it misses the Great Bustard sighting on Waterston Ridge in 2018. From this, it is clear that the parish supports considerable biodiversity, regardless of the impacts of agricultural practices and other human activity. Data on other wildlife is provided in Table 1 (p.7) of the Neighbourhood Plan.

2. Why we have to act

2.1 The fifth edition of the *UN's Global Biodiversity Outlook report* (CBD, 2020) provides a further wake-up call, raising concerns about peoples' current relationship with nature: continued biodiversity loss and ongoing degradation of ecosystems.

- 2.2** In November 2020 the *United Nations Environmental Programme* (UNEP) highlighted the twin crises of climate change and biodiversity loss and said they should be tackled together by conserving, managing and restoring ecosystems. As well as impacting lives and livelihoods, the UNEP points out that the rapidly changing climate is affecting species and ecosystems, driving loss of biodiversity. At the same time, protecting and restoring biodiversity is crucial to addressing climate change.
- 2.3** In the rural parish of Stinsford, we are well placed to work with nature to conserve, manage and restore ecosystems (known as nature-based solutions). This is one of the most cost-effective approaches to both mitigating and adapting to climate change and can unlock multiple other benefits. However, there may be other ways in which the parish can take action. This Strategy will build on existing proposals in the draft Stinsford Neighbourhood Plan 2021-2038.
- 2.4** It is a global crisis that requires everyone to play a part in tackling the causes of climate change and adapting to it, and locally we can play our part...

...and that is why Stinsford Parish Council declared a climate and ecological emergency in March 2021.

3. The basis for informed decision-making

- 3.1** To be able to play our part in tackling these twin crises, make informed decisions and track progress, it is important to understand the impact of activities in Stinsford Parish on climate change and also how climate change might impact on the parish.

3.2 The impact of activities in Stinsford Parish on the climate

The *Centre for Sustainable Energy* has developed a tool (a Community Carbon Calculator) that provides a guide to greenhouse gas emissions from Stinsford Parish. These are calculated using two complementary approaches, both of which are covered here.

Approach 1: territorial footprint

These are the greenhouse gas emissions that come from activities within the parish boundary, and so include emissions from traffic on the A35, for example. Aviation and shipping are apportioned from national figures to the local level. **This calculation suggests 16,366 tonnes CO₂ equivalent per annum.** A breakdown is at Annex A1.

Approach 2: consumption-based footprint

This approach provides us with a very different picture, taking into account the total emissions from individual households. So the domestic energy use part of this footprint will be the same as the territorial footprint, the rest is constructed differently. This calculation looks at how people live their lives and so includes emissions from things that are produced outside the community – e.g. almost all food, clothing, appliances and other services such as financial and banking. From a transport perspective, it looks at car ownership data and miles driven. Of course it doesn't include details of emissions from business activities on the basis that most services and goods won't be consumed by residents of the parish. **This gives us a total of 3,770 tonnes CO₂ equivalent per annum.** Details are at Annex A2.

- 3.3** Stinsford Parish is a rural parish with significant woodland and nature that can absorb and store carbon. This local carbon sequestration is accounted for in the territorial (though not the consumption) footprint. It is based on the Land Use, Land Use Change and Forestry emissions provided for local authorities by the Dept for Business, Energy and Industrial Strategy and is apportioned to parishes on the basis of land area. It is not clear in the case of Stinsford how 'fair' this formulation is. Of course neither if these calculations is perfect, far from it, but perhaps they provide a useful guide. Indeed, the designers of the tool stress that these figures should be used as 'a guide not a gospel'.

4. How climate change might impact Stinsford Parish

- 4.1** The risks associated with climate change, and to which it might be necessary to adapt, include:
- Flooding from the River Frome and from surface water run-off from heavy rainfall may damage homes and businesses.
 - Heatwaves may affect peoples' health, particularly those who are more elderly or vulnerable, and this require homes and business premises to be adapted.
 - Disease-bearing ticks that carry Lyme disease and other pests are likely to increase with climate change.
 - Drier summers and wetter winters may impact farming.
 - Global warming is moving the UK's climatic zones by up to 5km/year, making it difficult for wildlife such as deer, badgers, foxes, rodents to adapt and survive.
 - Threats from drought, increased risk of damage from pests, pathogens, wind and fire are likely to impact our woodlands.
 - Wildfires present a real risk to humans as well – it is very difficult to directly attribute wildfires directly to a changing climate but with hotter, drier conditions their likelihood increases.
 - Chalk grassland is needed is needed to absorb water flows in wetter winter.
 - Contemporary farming can lead serious soil depletion when combined with drier summers and wetter winters.
- 4.2** More broadly, we must consider the state of our rivers, woodlands, grasslands and heathlands because those that are polluted or ecologically degraded will face intolerable additional pressures from climate change. More positively, many households and businesses in the parish rely on groundwater and this is largely replenished in winter, so wetter winters should continue to ensure security of supply.

Part II: Climate and ecological emergency action plan

1. What can Stinsford Parish Council do?

1.1 Stinsford Parish Council needs to contribute to addressing the climate and ecological emergency. The following provides a set of proposals of areas where the council could potentially make a contribution that not only tackles these critical concerns but also improves peoples health and wellbeing, lives and livelihoods. However, it will only be possible with the active support of residents and businesses and through working in partnership with other organisations.

1.2 There are a number of **climate change relevant policies** in the Stinsford Neighbourhood Plan. These include the planting of appropriate trees and rewilding; employment opportunities offering 'high standards of environmental performance (SNP10); sustainable housing design (SNP9 and Table 7); better building design (SNP12). Transport policy (SNP14) encourages 'safe and attractive pedestrian and cycle routes and other measures. The Stinsford Neighbourhood Plan considers ecology by proposing that:

- diverse wildlife should be protected
- trees, woodlands and forests should be protected and enhanced
- local wildlife and habitats should be protected and expanded
- woodland survey and planting

These policies must be considered on an ongoing basis in respect to every decision made, and every action taken, by Stinsford Parish Council.

1.3 The main policy position on **biodiversity and ecological well-being** is SNP1. This policy calls for 'measures to support ecological improvement of wildlife habitats, including their climate change resilience'. It suggests that this could be supported by:

- wildlife-friendly and climate-resilient farming practices
- habitat enhancement schemes including, where appropriate, tree planting and the expansion of woodland and heathland areas
- improvement and expansion of the network of wildlife sites, corridors and stepping stones.

Again, this is a key policy area to be taking into account in every decision made, and every action taken, by Stinsford Parish Council.

1.4 **The Neighbourhood Plan includes a series of projects to be taken forward by Stinsford Parish Council** which have been designed to further improve our natural landscape and address some of the concerns raised by our community. Four of these set out climate adaptation and mitigation measures that can be taken and ways that we can improve the parish's biodiversity. These are thus considered a priority for action:

Project P1. Woodland Survey and Planting

The Parish Council will investigate undertaking a survey of the parish's woodlands, so that appropriate management can be encouraged.

The Parish Council will work with landowners, businesses and residents to:

- *encourage the appropriate planting of trees, woodland creation and other activities to help combat climate change and further enhance our natural environment;*
- *use public spaces (such as recreational areas and verges) to improve climate resilience and enhance the environment through rewilding and other initiatives;*
- *assess and manage the environmental and ecological impacts of potentially damaging activities in woodland areas (such as mountain biking, horse riding and other recreational*

pursuits) with a specific focus on reducing any detrimental impacts on soil carbon and habitat quality.

Project P3. Investigating new and improved recreational routes and accessible green spaces

The Parish Council will work with local landowners to investigate potential options to provide new and improved recreational routes and accessible green spaces.

Project P5. Public Transport Project

The Parish Council will work with Dorset Council and bus operators to explore potential improvements to the local bus services in response to suggestions from the local community.

Project P7. Cycle Project

The Parish Council will work with local landowners and the Highways Authority and take account of the views of local residents to bring forward the cycle route improvements identified in Table 9 as funding and resources permit.

1.5 Stinsford Parish Council can also play its part in reflecting and reinforcing the strategy set out by Dorset Council. It lists eight 'key themes' (based on fig. 6, p. 9 Dorset Council Climate and Ecological Emergency Strategy, 15 July 2021).

- Transport – active travel and public transport
- Buildings – energy efficient homes and homes safe from flooding
- Waste – less waste and community sharing
- Water – access to clean potable water and reduced flooding risk
- Energy Generation – reduced costs and increased security
- Economy – high skilled jobs and prosperity
- Food and Drink – healthy diets and food security
- Natural assets – increased access to green spaces and increased biodiversity

It also highlights that some of the largest potential gains from tackling the climate and ecological emergency are in improved health and wellbeing.

While many of these themes are reflected in the projects listed at 1.4, active consideration will be given to each of these themes and any further actions that can be taken in Stinsford Parish. These will be set out in Stinsford's Delivery Plan Action List.

1.6 We must also consider **the social implications of climate change**. Climate justice is central to this document. Because climate change impacts on the lives of everyone, it is important that everyone benefits from addressing climate change and that no one is left behind or suffers unfair detriment.

1.7 Climate change may impact differently on different groups. Impacts are not just about global issues such as sea level rise and climatic change driving migration as some regions become less habitable but also about impacts on how we live our lives. Many aspects of this have the potential for creating greater domestic tension from limitations on food supply and travel through to competition over land use and access to open space. For example at a very simplistic level, warmer climates can have a very different meaning for someone with a young family living in a small flat with no outdoor space to someone living in a large house with a large garden. Climate change reflects differently on all aspects of equalities and protected characteristic groups identified in the Equality Act 2010.

1.8 Climate change also has a very different meaning for many existing health conditions, and for the potential of new or little known health conditions coming to prominence. It also has implications for biologically grounded points in the human life cycle. Likewise it is essential that solutions to climate change and enhancing ecological well being are not at a cost to any specific group or individual. Climate change and ecological sustainability should be a to the benefit of all and no one should be left behind.

2. Targets: what does ‘success’ look like?

2.1 Different targets have been set:

- Nationally, the UK government has set a target of net zero by 2050.
- Dorset Council – carbon neutral by 2040
- Kingston Maurward College – net zero by 2025

2.2 Stinsford Parish has set its target to achieve net zero by 2040.

2.3 Rationale

2.3.1 As a small parish, we need to be realistic. Stinsford Parish does not have the power to achieve net zero itself. For example, we cannot disassociate ourselves from the fact that the A35 passes through the parish. This results in significant emissions as shown in Annex A1. What we can do is align ourselves with the targets of others who do have control over wider issues and continually press for action. While supporting the approach of Stinsford Parish’s major employer, Kingston Maurward College, the parish should align itself with the position of Dorset Council and aim at net zero by 2040. At the same time we recognise and will encourage bringing issues forward in advance of the Dorset Council target wherever possible.

2.4 In Stinsford the majority of actions will involve encouraging the reform of consumption-based activities, the expansion and improvement of green open space and rewilding and encouraging businesses and agricultural land owners to change many of today’s practices. There is a need for business to consider the impacts on the climate and ecology when taking decisions. We believe that the best way to achieve change is to better understand our contribution to climate change and appreciate how the choices we make can reduce our carbon impact, and therefore our impact on the climate and ecology.

2.5 Part of the job of an ongoing resident-based delivery mechanism will be to establish a clear set of indicators to allow for longitudinal assessment of progress through until 2050. Indicators will need to cover greenhouse gas emissions and ecology and take account of the varied habitats of the parish, from the chalk downland to the water meadows. Success will be when the parish can evidence the fact that it is making a positive contribution to climate change and ecology and that residents are reaping the benefits of this.

3. Delivery sub-group, membership and governance

3.1 The Parish Council must take final responsibility for decisions taken but day-to-day delivery of objectives will be through a sub-group. The sub-group will involve residents and utilise local skills, knowledge and experience. Progress will be fed back into council meetings. The process will follow that tried and tested approach utilised in the delivery of the Stinsford Neighbourhood Plan.

3.2 The Parish Council will

- agree formal terms of reference for the climate change and environment working group
- lobby / petition for action where appropriate and within its formal remit
- ensure that the approach taken towards the climate and ecological emergency is compliant and complements existing Parish Council policy established in the Neighbourhood Plan
- ensure best practice through dealing with its own assets
- ensure that consideration is given to climate, ecological and climate justice in all policy decisions by looking to develop a model that engages environmental and equality impact assessments in a single assessment
- provide overall guidance and appropriate support
- take into account climate change and biodiversity implications in our decision-making
- encourage, engage, advise, promote and make residents and the business community aware of green initiatives
- ensure that a broad gender and equalities balance is reflected in the composition of the working group and that its functions enable all residents the opportunity to participate
- set up working partnership relations with other organisations as required
- bid for funding to gain expert advice and other support if and when required

3.3 Climate and Environmental Emergency Working Group

3.3.1 The role of the group will be to encourage resident participation in developing, delivering and monitoring actions agreed with the Parish Council.

3.3.2 The working group will:

- establish baseline research
- deliver the action plan
- establish new actions, remove existing actions and review actions as appropriate and seek agreement from council for changes
- engage in promotional activities
- monitor outcomes
- regularly feed back to the Parish Council at Parish Council meetings

3.4 Working with others

3.4.1 We can't do this on our own. A Stinsford Communication Strategy has been developed (2 August 2022) to improve community engagement with a view to encouraging inputs, involvement and action on this critical issue. The success and effectiveness of this strategy will have a direct impact on what can be achieved in respect to the climate and ecology.

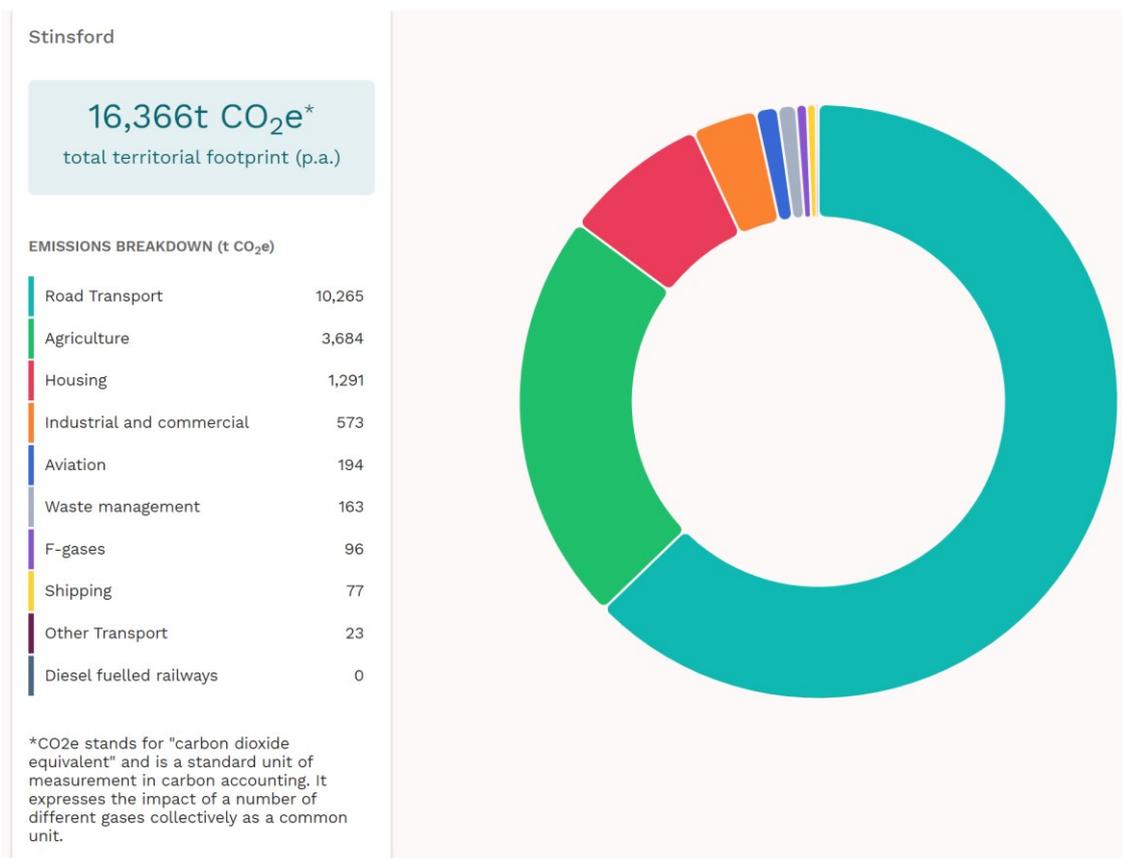
3.4.2 This strategy will identify other agencies who have data, knowledge, expertise, and funding if appropriate, that we can draw on. Kingston Maurward College will be of critical importance in this respect.

4. Delivery actions

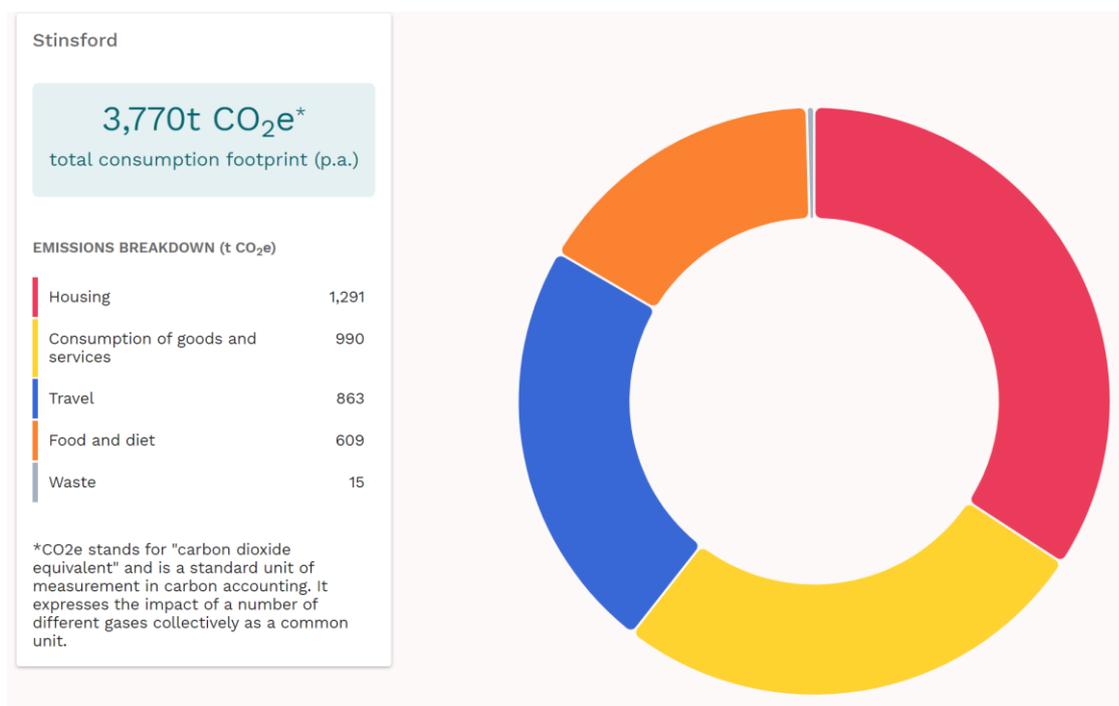
4.1 Stinsford Parish Council has created a Delivery Plan Action List. It is divided into short (1-year), medium (2.5 years) and long term (5 years+) actions. This is a living document that will be updated as this strategy evolves, plans are developed and action is taken.

4.2 Once the working group is established, the objectives will be reviewed and amended with all changes being subject to the agreement of the Parish Council. The Parish Council will review progress and identify further opportunities for action at least every 6 months.

Annex A1 – Stinsford Parish – territorial carbon footprint



Annex A2: Stinsford Parish, consumption-based carbon footprint



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