



BALANCE

Balance™ Methodology

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The Balance Peer Reviewed Methodology: Executive Summary

- Balance offers a new form of carbon offsetting, designed to prioritize the creation and protection of natural biodiversity in planting locations where the Balance methodology is used. The Balance Methodology is an innovative form of carbon offsetting that represents an evolution away from the commonly criticized malpractice shown previously by other offset providers.
- “The Balance Methodology” outlines best practices for implementing and safeguarding biodiversity as the essential requirement of related planting projects. It discusses how Balance implements the lessons learned from the failed initiatives of the past to create a new form of carbon offsetting. This new form evolved from and improves upon the concept of carbon neutrality, whose reputation deteriorated along with that of carbon offsetting as a whole for reasons discussed in “The Balance Methodology Part Two.”
- “Balance” is a trademark of Balance Eco, Limited.

Balance Methodology Part One: Balance In Practice

The Balance planting partner contract highlights five key points (with an extra, non-obligatory point in contract) which distinguish Balancing from offsetting emissions:

- 1. Permanence. Creation of natural forest cover with a minimum of 99 year protection and carbon with its carbon sequestration capacity independently monitored, promoting permanence and longevity of created carbon sequestration and biodiverse ecosystems. This is done in consideration of the radiative forcing cycle of carbon dioxide in the atmosphere, and the necessity for trees to die and create deadwood to optimise biodiversity and additional carbon sequestration benefits.
- 2. Force Majeure, ensuring compensation in case of unforeseen events, including but not limited to an epizootic or a plant disease affecting part or all of the Woodland, road construction, compulsory purchase, buildings, or a severe natural disaster gravely affecting the Woodland.
- 3. Public Access. Customers and clients and the wider public are able to physically visit the forest areas which they have chosen to create.
- 4. Additionality. If the funding has not arrived, purchased trees cannot be planted, thus ensuring additionality of Balance’s affiliated planting projects, and that all investment contributes towards actual reforestation. Additionality protocols for Balance’s UK-based projects are set out in the Woodland Carbon Code (WCC) verification system in the UK (discussed p. 35-41), Gold Standard and REDD+ internationally. Balance is also interested in various other reputable verification standards worldwide.
- 5. Species Diversity. Before contacting potential partner projects, Balance ensures that a number of biodiversity-based planting principles are met as obligations. These are detailed in depth on pages 17-32, and include, first, the prioritisation of indigenous tree species and local genetic stock.
 - The right trees in the right places, including an understanding of the land's historical context, and planting exclusively on previously forested land.

- The prioritisation of native species.
 - Consideration of soil type and soil organic matter when planting, and planning for carbon sequestration in soil.
 - The formation of a varied stand with genetic diversity, a healthy understorey, and the use of relevant age classes to enhance biodiversity.
 - Inclusivity and equality in social and economic benefits where necessary.
 - Necessary considerations in tree planting for adaptation to climate change.
 - A displayed consideration of mitigation of the threats of pests and diseases.
 - The reduction of dependence on invasive species.
 - An understanding of the importance of forest structure, connectivity between forest ecosystems and tree size both for carbon sequestration and forest resilience purposes.
 - Commitment to the production of data and the frequent review of management and planting strategies based upon findings.
- 6. For each tonne of balance, an additional tree is planted in a non-carbon forest. This can be close to the consumer or the client's business, and can be planted in locations accessible to customers and beneficial to their communities, even in urban areas, and is linked to the carbon tonne through Balance's public database. This is unique amongst offset initiatives, and is designed to increase biodiversity benefits and create wildlife corridors in urban and rural environments. It also allows us to supply funding in locations that would not otherwise receive carbon financed tree planting benefits. This extra step is important for creating enhanced trust and furthering the standards of best practice amongst offset initiatives, and creates a high impact icon near the client's business enabling further communication to customers and stakeholders.

This stipulation is unique amongst offset initiatives. It is designed to increase biodiversity benefits and create wildlife corridors in urban and rural environments. It also allows us to supply funding in locations that would not otherwise receive carbon financed/ tree planting benefits. This extra step is essential for enhancing public trust and furthering best practice standards amongst offset initiatives. This step also creates a high impact icon near the client's business, to promote further communication with customers and stakeholders.

Balance in Business

The core method used to determine the number of Balance Units purchased by the client when a client company chooses to balance its carbon emissions is termed Balance to Assessment. The Balance to Assessment system depends on the Balance Unit, which, in simple terms, is a way of valuing nature and its reciprocal benefits to humanity, as well as the intrinsic and innumerable benefits of biodiversity for all species. In simplified terms, the process is as follows:

1. The balance mantra is efficiency reduction balance. In the first instance we direct clients to efficiency and reduction measures available on our website.
2. If you have measured your carbon footprint from your internal assessment, enter the tonnage of carbon to be Balanced.
3. If you do not know your carbon footprint, you are referred to have a carbon assessment carried out by carbon assessment specialists Ecometrica

Balance is also developing **Balance My Life**, a system for individuals based on household income, ready by Q3 2022.

- Since it is critical for the lowering of global atmospheric GHG levels that offsetting must only follow the optimization of emissions reductions, an integral part of the Balance process includes advice on the practical efficiencies and reductions to be implemented.
- This information, found on the Balance website, takes readers through a step-by-step process of understanding climate impacts in terms of a property's square footage, energy usage for heating and cooling, number of staff, and flights and other travel, including average car mileage. It is imperative to Balance that each client makes a serious effort to reduce emissions within their own business and extends the same challenge to its suppliers. Only unavoidable emissions are considered for offsetting.
- Balance is currently in the development stage of a UK grant application in collaboration with Gloucestershire University and Ecometrica to create a machine learning AI system that will analyze clients' accounting systems and generate accurate efficiency data in support of reductions advice whose long-lasting impact will help to significantly streamline this process. This application is likely to be submitted in Q3 this year.
- As noted earlier, the Balance Planting Principles (p.16-30), included in the Planting Partner Contract include obligations for supporting ecological diversity, prioritizing native species, understanding soil types, promoting healthy forest understory, adapting to climate change, and mitigating the negative effects of pests and diseases. The Balance Planting Principles also encompass ecosystem services, and quantify the relative benefits of the including the foregoing points in the planning and implementation of planting projects. The end result encourages carbon sequestration, increased transpiration and forest health. *Increased transpiration* (the release and evaporation of water from plants) is an area where Balance is interested in assisting with further research.
- Because biodiversity is essential for optimal carbon sequestration in a forest, pages 25-30 include a scientific discussion of its inherent value and the various ways in which biodiversity is linked to carbon sequestration.
- The history of forest cover and forestry within the UK is discussed on pages 30-35 to highlight the increasing prominence and importance of afforestation strategies in light of ever-increasing demands for forest-based offsetting. Political frameworks increasingly incorporate forest resilience, native species and biodiversity.
- The Woodland Carbon Code, as the verification standard for Balance's UK-based planting projects, is outlined on pages 35-41. This section offers a helpful overview of how a standard can incorporate the various considerations in the Balance Planting Principles section. A case study of the Forest of Marston Vale (p.38-41), Balance Eco Limited's first contracted planting site, provides a specific example of the project types which Balance works with and how our projects are chosen for their potential success in the critical categories outlined by this methodology.

Balance Methodology Part Two: The History of Carbon Offsetting and the Context for Balance

Part Two contains an extensive analysis in this section explains why the term "carbon-neutral" is outdated, while reviewing critical failures of previous carbon offsetting initiatives. This lays the groundwork for the necessity of the new approach focused on biodiversity, additionality and best practice, which Balance embodies.

Part Two also includes:

- The political context for Balance.
- Biodiversity-based carbon offsetting as a solution.
- An introduction to the carbon market.

Part Two concludes by describing the various challenges facing carbon offsetting including additionality, permanence, heterogeneity and lack of transparency, duplicity, ethical concerns, greenwashing and distraction from direct emissions reductions.

Balance Methodology Part Three: Lessons From Nature-Based Solutions (NbS)

Part Three discusses the origins of nature-based solutions and their rapid development in the modern day.

- Nature-Based Solutions and Modern Policy.
- The benefits of nature-based solutions: biodiversity, ecosystem services and sustainability, social and economic co-benefits, inclusivity, and carbon sequestration.

This section also describes how nature-based solutions might continue to be developed in light of the most recent research and how Balance incorporates the lessons learned from nature-based solutions to select and operate its planting projects.

The importance of NbS is such that their contribution towards socio-economic leveling, particularly in developing regions of the world, can enhance employment, mental health and social cohesion in local communities, which of course are potentially vital partners who can help remedy the global climate and biodiversity crises. These lessons are discussed comprehensively, and contextualized within Balance in its conceptualisation and the formulation of our methodology as outlined in Part One. It is imperative to Balance that each client makes a valuable effort towards reducing emissions within their own business and to let their supply chain suppliers know that they prefer to purchase from balanced suppliers and that only unavoidable emissions are considered for offsetting. Balance is currently in the development stage of a UK innovative grant application in collaboration with Gloucestershire University and Ecometrica to create a machine learning AI system that will analyze the clients' accounting system and provide accurate efficiencies. Reductions advice permanently, which will aid significantly in streamlining this process. This application is likely to be submitted in Q3 this year.

- The Balance Planting Principles (p.16-30), included in Point 1 of the Planting Partner Contract, include obligations for considering species diversity, the selection of native species, soil types, understorey promotion, adaptation to climate change, accounting for pests and diseases, ecosystem services, and the relative benefits of the inclusion of these points in the planning and implementation of planting projects concerning carbon

sequestration, increased transpiration and forest health. *Increased transpiration* is an area in which Balance is interested in assisting with further research.

- Biodiversity is essential for the optimization of carbon sequestration in a forest location. Pages 25-30 include a detailed scientific discussion of the various ways in which biodiversity is linked to carbon sequestration and the intrinsic value of biodiversity.
- The history of forest cover and forestry within the UK is discussed at length (p.30-35), highlighting the increasing prominence and importance of afforestation strategies in light of ever-increasing demands for forest-based offsetting. Political frameworks are increasingly incorporating forest resilience, native species and biodiversity.
- The Woodland Carbon Code, as the verification standard for Balance's UK-based planting projects, is outlined on pages 35-41. This offers a helpful overview of how a standard can incorporate the various considerations in the Balance Planting Principles section. A case study of the Forest of Marston Vale (p.38-41), Balance Eco Limited's first contracted planting site, provides a specific example of the project types which Balance choose to work with and how the projects we are aligned with are chosen for their success in the critical categories outlined in this methodology. Internationally, Balance Eco Limited works with REDD++; though an outline of this process is not discussed in this methodology, Balance advises its planting partners to adhere to the terms within our planting partner contract.

Balance Methodology Part Two: The History of Carbon Offsetting and the Context for Balance

- An extensive analysis of the outdatedness of the term carbon-neutral, and the various critical failures of previous carbon offsetting initiatives, lay the groundwork for the necessity of a new approach focused on biodiversity, additionality and best practice, which Balance embodies. Part Two also includes:
 - The political context for Balance.
 - Biodiversity-based carbon offsetting as a solution.
 - An introduction to the Carbon market.
 - The various challenges facing carbon offsetting including additionality, permanence, heterogeneity and lack of transparency, duplicity, ethical concerns, greenwashing and distraction from direct emissions reductions.

Balance Methodology Part Three: Lessons From Nature-Based Solutions

- Discusses the history and origins of nature-based solutions and their rapid development in the modern day.
 - The origins of nature-based solutions.
 - Nature-Based Solutions and Modern Policy.

- The benefits of nature-based solutions: biodiversity, ecosystem services and sustainability, social and economic co-benefits, inclusivity, and carbon sequestration.
- A description of how nature-based solutions might continue to be developed in light of the most recent research and how Balance incorporates the lessons learned from nature-based solutions to select and operate its planting projects. The importance of NbS is such that their contribution towards socioeconomic levelling, particularly in developing regions of the world, can enhance employment, mental health and social cohesion in local communities and, of course, are potentially vital contributors to combating the global climate and biodiversity crises.

Peer reviewed:

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