

Ecosystem Service Statement for the Supply and Installation of a 20.8kW Solar Photovoltaic System at Birling Manor, Birling Gap, Sussex



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Introduction

This ecosystems statement outlines the environmental impacts and benefits of the proposed 20.8kW solar photovoltaic (PV) system installation at Birling Manor, located within the South Downs National Park. The project is committed to aligning with the key criteria outlined to ensure environmental sustainability, conservation, and enhancement of the park's natural ecosystems.

Criteria A: Sustainably Manage Land and Water Environments

The solar PV system will be designed with minimal environmental footprint, ensuring no disruption to the surrounding land and water ecosystems. Bucket mounted panels will be installed with consideration to the natural terrain, preventing soil erosion and water runoff.

Criteria B: Protect and Provide More, Better and Joined Up Habitats

The installation site will be carefully selected to avoid sensitive habitats and species. The project aims to promote biodiversity by incorporating features that support wildlife habitats and maintaining green spaces around the installation.

Criteria C: Conserve Water Resources and Improve Water Quality

No chemicals or pollutants will be used in the maintenance of the system, ensuring water quality is not compromised.

Criteria D: Manage and Mitigate Risk of Flooding

The layout of the solar arrays will be engineered to manage and mitigate flooding risks. Proper drainage systems will be incorporated to channel rainwater effectively, reducing the risk of water accumulation and flooding.

Criteria E: Improve the National Park's Resilience to, and Mitigation of, Climate Change

The solar PV system will generate clean, renewable energy, reducing greenhouse gas emissions and dependency on fossil fuels. This contributes to the park's climate resilience by mitigating climate change impacts.

Criteria F: Increase the Ability to Store Carbon

The project supports carbon storage by preserving existing green spaces and enhancing vegetation around the solar arrays, which aids in sequestering carbon dioxide from the atmosphere.

Criteria G: Conserve and Enhance Soils

Soil health will be maintained by minimizing land disruption during installation and employing soil conservation practices, including planting vegetation that prevents soil erosion.

Criteria H: Support the Sustainable Production and Use of Food, Forestry, and Raw Materials

The solar PV system promotes sustainable energy, reducing the pressure on raw materials. It is also positioned to avoid interfering with agricultural, forestry activities, or the natural growth of vegetation.

Criteria I: Reduce Levels of Pollution

By generating green energy, the solar PV system significantly reduces air and water pollution, contributing to a cleaner and healthier environment within the park.

Criteria J: Improve Opportunities for People's Health and Well-Being

The clean energy produced enhances air quality and provides educational opportunities for visitors to learn about renewable energy and conservation, promoting physical and mental well-being.

Criteria K: Provide Opportunities for Access to Natural and Cultural Resources

The installation will be designed to ensure visitors still have complete access to the natural beauty and cultural resources of the park. Educational signage and interactive displays on solar energy and conservation will enrich the visitor experience.

Conclusion

The 20.8kW Solar PV system at Birling Manor is committed to the environmental sustainability and enhancement of the South Downs National Park. Every aspect of the project, from design to operation, will be executed with the utmost consideration for the ecological, cultural, and aesthetic integrity of the park, ensuring it continues to be a sanctuary for wildlife and a haven for visitors.