Measuring Biodiversity Improvements at the Solar Plant in Blangslev (DK)

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Summary of case study for Better Energy's integration of biodiversity into a newly constructed solar plant site, using the Biological Diversity Protocol to assess the scale of impact

By Habitats (Cille Blak), October 2020

Our natural capital (the state of life around us) is declining worldwide, facing us with possible futures that jeopardize our societies. In Blangslev, Denmark, new methods for sustainability are being developed and explored. Better Energy, a company that builds and operates solar power plants, is on a journey to combine clean energy production with native species and habitat conservation. By including considerations for biodiversity in the construction of the new solar plant in Blangslev, Better Energy has made space to improve the quality of nature.

Growing habitats for wildlife at Blangslev solar plant

At the Blangslev solar plant, Better Energy, with the help of Habitats, has implemented eight distinct 'points of impact' within the plant site to improve local conditions for biodiversity in addition to the solar plant field which is grazed by sheep.

Biodiversity impact

30 years after finishing the construction, the changed use of land leads to a projected increase of the Positive Biodiversity Footprint from 0.6% to 61.1% of the total area (67.1 ha). The quantification of the biological impact is obtained by estimating the conditions of the associated ecosystems and using the methodology in the Biological Diversity Protocol (BD Protocol).

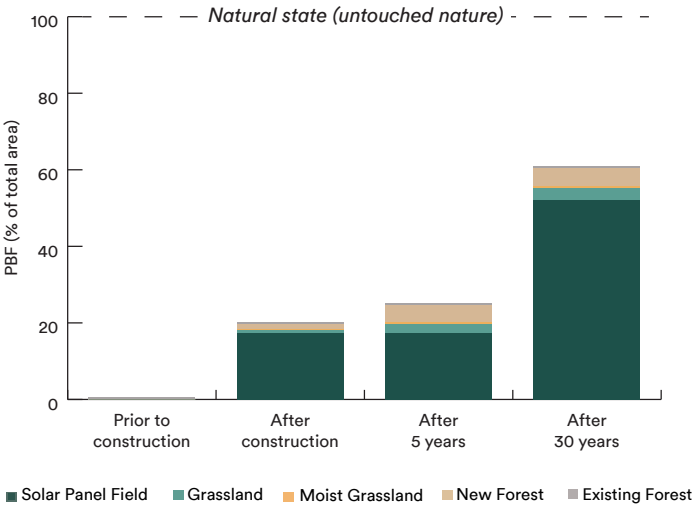
Biological Diversity Protocol (BD Protocol). An accounting framework which enables any organization to record systematically and consolidate net biodiversity impact data (https://www.nbbnbdp.org/bp-protocol.html).

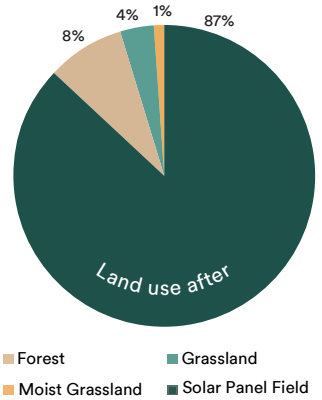
Biodiversity Footprint (BF). Surface area adjusted for condition. It is further broken down into a Positive Biodiversity Footprint (PBF) and a Negative Biodiversity Footprint (NBF), both expressed in surface area equivalents e.g. 250 ha eq of PBF and 750 ha eq of NBF for a total of 1000 ha.

Contribution to Denmark's national biodiversity targets

At the Blangslev site, Better Energy has created an area with improved conditions for wildlife habitats to develop. After construction of the power plant, the vegetation will develop over time without regular farming-related disturbances. This will increase the area of suitable habitat for the local flora and fauna and functionally closes the gaps between the small biotopes and the larger landscape context. This will contribute to Denmark's current biodiversity goals, notably Measure 3 "Nature conservation plans will create a better and more connected countryside" and Measure 7 "New habitats for the benefit of biodiversity and climate".

Find more information about the case at www.habitats.dk.





Top right: *The case site at Blangslev and eight points of impact.* **Middle right:** *The Positive Biodiversity Footprint compared to state of untouched nature.* **Bottom right:** *The land-use before and after construction.*