CEN briefing note: solar

- **The Government's recent statement on solar and planning policy reiterated and reinforced existing protections for agricultural land**: information on agricultural land will be added to the Government's database of renewable energy projects, the cumulative impacts for solar projects near one another will now be considered, and a new body created to ratify soil surveys that determine what agricultural land grade a project is built on.
- **Planning rules already protect productive agricultural land from solar applications.** There is a presumption against building solar farms on 'best and most versatile' land, with a stated preference for development on land that is not in agricultural use. The Government has recognised that this may not be possible for small sections of larger solar farms; here preference is given to poorer-quality agricultural land that gives inconsistent and/or lower yields, or is unsuitable for a wide range of crops. Despite the deployment of solar farms, the UK's agricultural land area has remained constant over the last decade.
- **Even if all future ground-mounted solar was built on farmland, the impact on UK food production and self-sufficiency would be negligible; climate change will impact both.** The Government has a target to increase ground-mounted solar fivefold by 2035 to meet electricity demand and reduce emissions, but we are not moving fast enough. This target will require roughly 70,000 hectares, which makes up 0.4% of the UK's current agricultural land area and would otherwise produce just 4% of the UK's annual wheat yield. The UK already produces 92% of the wheat we consume, but unusually warm, wet winters like we have seen this year could bring this down to 68%. Climate change continues to be one of the biggest threats to reliable crop production both at home and abroad.
- **Solar farms keep Britain's food supply resilient by ensuring farms can stay afloat when harvests are threatened.** Farmers know their land best, and it should be their prerogative to decide what they do with their property. The National Farmers' Union has said that hosting solar farms on less productive land is a good way for farmers to diversify their income, making them more resilient to the negative effects of poor harvests and price shocks. Agri-volatics combines husbandry and energy production to give farmers the best of both worlds, for example by letting sheep graze on solar panel sites so grass doesn't cover the panels.
- **The UK's least self-sufficient food sectors are fruit and vegetables, which often require heated glasshouses for year-round production.** Cheap energy is a critical input to horticulture if we are to grow more of what we eat and become less dependent on imports; ground-mounted solar can provide cheap

energy to farms that can cut the cost to consumers of buying healthy foods like fruit and vegetables.

- **More ground-mounted solar projects could help to improve biodiversity.** The Government's biodiversity net gain ('BNG') rules require all developments to improve biodiversity by at least 10%. While this will apply to larger solar farms (classified as Nationally Significant Infrastructure Projects) from 2025, solar developers are already offering substantial BNG in their applications. Many go beyond legal obligations and offer as much as 70%.
- **Cutting the wait time for projects to connect to the national grid will ease the clustering of large solar farms in one area.** Clustering (multiple large solar farm applications in one area) is due to the need for projects to be built as close as possible to national grid connection sites to minimise electricity losses and transmission costs. There has been an increase in clustering due to generation projects (such as coal-fired power plants) closing down and freeing up such sites for renewables. Developers prefer to build to existing grid connection points as the queue to get new ones is up to 14 years long, and the buildout of new points is often held up by local opposition to new power lines and substations.
- **The Government recognises that both utility-scale solar farms and rooftop panels will be needed to meet electricity demand out to 2050 and beyond.** Rooftop panels produce less energy than larger solar farms, but do not require planning permission. Whilst utility-scale solar does require planning permission, it is much cheaper due to its economies of scale and generates more electricity. A good balance of both will be needed to minimise land use change and keep clean energy affordable while meeting demand. Both types are cheaper than fossil fuel generation: solar has fallen in cost by 80% since 2010; the price of natural gas has doubled in the same time period.
- **Repeated delays to planning decisions on large solar farms is causing investors to consider moving elsewhere.** Applications to the Secretary of State for planning permission already cost developers £10 million to submit. Repeated delays increase the time spent waiting for a decision and therefore the cost of keeping planning lawyers and consultants on retainer. Solar developers are now looking to countries such as Namibia, Jordan, and Spain; given that ground-mounted investment alone is worth £20 billion, this is not money that the UK can afford to lose.