

Security Issues in the **RENEWABLE ENERGY SECTOR**

EXECUTIVE SUMMARY

As the renewable energy sector continues to grow across the UK, so does the number of security threats faced by the sector. The ongoing COVID-19 pandemic and subsequent increase in unemployment have almost certainly contributed to these threats, while regulatory changes linked to the UK's departure from the EU are also likely to impact the sector. The most prominent threat to day to day operations in the renewable energy sector is crime, in particular, theft, and is most likely to

impact solar farms where thieves can easily access and remove equipment. Larger renewable projects such as wind farms are significantly less likely to experience theft, due to the larger size of equipment used; however, disruption to the creation and expansion of sites from local activist groups remains an obstacle to growth in the sector. The following report will provide an in-depth analysis of the key threat types and advice on how your business can mitigate the associated risks.



Renewable electricity generation by technology in the UK between 2016 and 2019

Source: Renewable Statistics Gov.uk

Threat types

Threats to the renewable energy sector can take the form of crime, civil unrest such as protests and targeted activism, and regulatory changes to the industry. The impact of these incidents includes stolen equipment, disruption to work, and regulatory changes.

CRIME

Criminal activity in the form of theft is the most prominent threat faced by the renewable energy sector. In the UK, the growing number of solar farms provides an attractive target for both organised criminal groups (OCGs) and opportunistic individuals seeking to profit from the sale of stolen items such as solar panels.

The majority of crimes are opportunistic in nature and involve unsophisticated tactics, with thieves typically targeting items available in areas they are familiar with. Opportunistic crime often occurs when thieves pass by an area such as a solar farm and observe lax security measures such as inadequate fencing or lighting. Police estimate that 20–30 percent of metal theft is committed by organised criminal groups (OCGs), who target specific sites known to be accessible, likely following reconnaissance on these sites. OCGs are typically able to travel further distances than opportunistic lone offenders to identify the most suitable and lucrative targets. Metalrelated crime moves almost in waves across the country as criminals move to softer targets as security tightens in the areas where they have been active.

The techniques used by thieves evolve as police identify and concentrate resources on new areas with high incidence rates. From 2015, perpetrators of metal theft became more sophisticated in how they identified targets and carried out the thefts. In one incident in Yorkshire, a group of men wore high-visibility jackets and positioned cones on a road to divert traffic overnight, allowing them to transfer lead stolen from a church roof, while often posing as roof repairers. It is plausible that thieves would seek to use similar tactics to target areas such as solar farms. Thieves also make use of technology to select their targets, with satellite imagery available online, for instance, facilitating the identification of solar farm locations.

The price of goods influences the incidence of theft, with price fluctuations broadly correlating with increased or decreased criminal intent to engage in such thefts, based on the corresponding financial rewards it offers at a given time. The COVID-19 pandemic and subsequent negative economic impact have almost certainly acted as a driving force for individuals who have reduced or lost their incomes to engage in organised or opportunistic thefts throughout the UK. Furthermore, continued lockdowns have likely reduced the number of staff on renewable energy sites, increasing their attractiveness as targets.





Source: Office for National Statistics

PROTEST/ACTIVISM

While support for the renewable energy industry is largely broad, in large part to growing global awareness around climate change and negative environmental impacts of fossil fuels, localised discontent with renewable energy continues to occur. This is largely in response to large projects such as wind farms and driven by local residents opposed to what they perceive as negative impacts to their area. Such objections typically occur at the planning stage and can delay the progress of projects while a consultation process is undertaken.

A key objection to the creation of wind farms is the negative effect on tourism. In October 2020, a mountaineer who had previously climbed Mount Everest spoke out against plans for a wind farm in the Western Mournes area of Northern Ireland, referring to the area as a tourism "golden egg". He also credited the COVID-19 pandemic and subsequent lockdowns for a renewed interest in outdoor activities as people seek to socialise outdoors. Similarly in March 2020, several highprofile individuals petitioned against plans to construct a wind farm off the coast of Suffolk. Publicity on social media and in traditional news media around the negative effects on tourism tend to increase awareness and promote opposition to such projects.

Environmental damage linked to wind farms is also a driving factor for those opposed to their construction. A peat landslide in Co. Donegal, Northern Ireland in November 2020 near the site of an under-construction wind farm led to criticism of the industry after peat and debris polluted a nearby river with EU protection status due to its location as a salmon habitat. A local TD criticised the farm, claiming environmental groups had raised concerns about such issues in their objection to the site during the consultation phase. Environmentalist groups use social media sites to raise awareness of their cause and mobilise supporters. 'Wind Energy's Absurd', an anti-wind farm group based in Scotland, has more than 4,800 followers on its Facebook page and promotes its agenda primarily through social media. However, these groups also organise in-person protests, usually outside local government offices and the offices of other project decision makers.



Protesters against the Limekiln and Drum Hollistan developments gather outside the Victoria Hall, November 2019. Source: John O'Groats Journal and Caithness Courier