



Solar Energy Farms

Clean, quick construction, and safe permanent access over any ground. Tensar has the experience and expertise to make a real difference with groundworks design for your solar farm project.





Solar projects are a crucial part of the renewable energy generation mix. New solar projects are predominantly located over agricultural farm land or environmentally sensitive areas.

This presents geotechnical challenges for multiple site zones during construction, such as access roads (permanent and temporary), substations, working platforms and compound areas.

Tensar has proven groundworks solutions, which if considered from the earliest stages of a project, can reduce stormwater runoff and other environmental impacts, speed construction, and lower construction and future maintenance costs.

DECARBONISE

Minimising the construction carbon footprint of any project is essential. It is particularly so for renewable energy projects. Tensar solutions deliver meaningful savings in total carbon emissions by significantly reducing the volume of quarried aggregate required on a project — helping to decarbonise the project supply chain.

Scan the QR code to learn more.

PROTECT

Every hydrogen production and storage project will impact the local environment. Stakeholder concerns will need to be addressed at the planning stage and measures should be taken in the design and construction stage to minimise and mitigate impacts on hydrology, ecology, local infrastructure, and communities. Tensar solutions, when adopted from the outset, can help to protect the environment while minimising hydrological and ecological impacts, as well as aid progress towards biodiversity net gain targets.

REDUCE

Local communities and infrastructure can be heavily affected during the construction of any major project. Low volume rural roads are particularly at risk from the higher truck loading from construction traffic. Tensar solutions significantly reduce the volume of aggregate required and material excavated and removed from site. This alleviates the traffic management schedule by reducing vehicle movement on and off site, improving safety — minimising damage and congestion to local roads and reducing impact on local communities.



TRIED & TESTED

With Tensar Renewable Energy Solutions, you can save time, cost and carbon, and have a positive community impact on your next project.

TENSAR SOLUTIONS FOR SOLAR FARMS

- Access roads
- → Cable trenching
- → Working platforms
- ⇒ Site compounds
- Foundation support for sub-stations



The three key project stages where **Tensar can make a difference**.

When can Tensar involvement have maximum effect and benefit your project?



PLANNING



DESIGN



CONSTRUCTION

Planning Input

- Preliminary proposals and outline design for planning purposes.
- Environmental impact assessment — minimise and mitigate effect on hydrology and ecology.
- Decarbonisation measures.
- Planning enquiry support.

Design Input

- Scheme proposals advice based on 40+ years experience.
- Optimised and detailed design solutions with quantified carbon savings.
- Free Tensar+ cloud-based design software.
- Osted alternative solutions.

Construction Input

- Value engineering of crane platforms, laydown areas, compounds and temporary access roads.
- Expert on-site support.
- Unrivalled experience in construction over extremely weak soils and peatland.
- Obecarbonsing the supply chain.

How does Tensar Technology benefit solar energy projects?

Tensar InterAx geogrids are engineered to stabilise and strengthen granular soils. The geogrid interlocks with the granular particles, stabilising the soil to create a stronger, stiffer material (MSL Mechanically Stabilised Layer).

By incorporating one of more layers of Tensar® geogrid in a layer of aggregate, the bearing capacity is increased, protecting the weaker soils below. This enables thinner aggregate layers to be used, reducing cost and construction time.

Access Track

With geogrid

Without geogrid

Compound Area

With geogrid

Without geogrid









44% reduction in thickness (Typical)

50% reduction in thickness (Typical)

→ Access roads

→ Working platforms

→ Sub-station platforms

→ Site compounds

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