Solar Guide

BlueScope

Steel Solutions for Large-Scale Solar

Australian steel for Australian conditions.



The Australian challenge

Solar is at the forefront of Australia's accelerating transition to renewable energy. With products designed specifically for the unique Australian environment, and onshore solutions for steel structural or mounting systems, there's a network here waiting to help make your project happen.

Image credits: Aldoga Solar Farm, QLD, Australia. Photos supplied by Acciona Energía.

At BlueScope, we don't just manufacture steel, we provide a partnership that helps mitigate risk and find the best solution for your project.

The steel used in solar systems here must endure some of the harshest climatic conditions in the world. From extreme UV radiation and heat to corrosive soils, the Australian environment can be unforgiving. With over 90 years of experience manufacturing in Australia, our products are specifically designed, developed, and tested to withstand our home environment. For decades, our team of scientists has conducted both real-world exposure and accelerated laboratory testing to ensure proven performance and durability. Our steel for solar products also undergoes rigorous quality assurance testing and is fully traceable to the point of production, giving you greater confidence in the integrity of your solar components.

We are committed to enabling the renewable energy sector, helping developers, Engineering Procurement Contractors (EPCs), and Original Equipment Manufacturers (OEMs) navigate the local supply chain. Whether you need to optimise mechanical properties for components, or customise steel solutions to meet compliance requirements, BlueScope provides the technical reliability and local support that you need.

We can provide your project with Australian-made structural solar steel solutions, technical expertise, and supply chain security.

Our wide product range is:

- Australian made
- Designed and tested for Australian conditions
- Fully traceable to point of production
- Manufactured to relevant Australian and international standards
- Corrosion-resistant

Our offering also includes:

- Solar expertise backed by experienced sales and business development teams
- Product specification assistance
- R&D assistance
- Technical support
- Project management
- Testing capabilities
- Data available to support local economic impact calculations
- Support accessing the Australian solar supply chain



Supply chain case study

Glenrowan Solar Farm

Image credits: Glenrowan Solar Farm, VIC. Photos supplied by ARRAY Technologies.

Steel manufacturer
BlueScope

Distributors
Steelforce Distribution, BlueScope Distribution

Manufacturer/Fabricator
Austube Mills, Harrington Industries

OEM
ARRAY Technologies

Tracking System
ARRAY DuraTrack®

Project Developer
Pacific Partnerships

EPC Manager/Contractor
UGL

Located in Glenrowan, Victoria, the Glenrowan Solar Farm features steel manufactured by BlueScope for torque tubes and other critical components. BlueScope also facilitated collaboration among supply chain partners to support project delivery.

BlueScope's role in supply chain:

- Specified steel for Australian conditions
- Technical support
- Corrosion site assessment
- Facilitated introductions to supply chain partners
- Provided solutions to meet required specifications and standards
- Facilitated technical solution development
- On-time, quality delivery
- Product development support
- Coating mass solution

Committed to the Australian market

BlueScope is Australia's largest steel manufacturer. For over 90 years we've helped build the nation's infrastructure, and our zinc-coated products have been used in Australian environments for over 60 years.

Renewable energy lies at the heart of our business strategy. We are contributing to the continued growth of the renewable energy sector, and renewables in turn are a critical enabler of our industry's decarbonisation pathway and transition to net zero. Our experienced renewable energy team has been successfully helping to deliver thousands of tonnes of Australian-made structural and tracker steel to projects across the country.

We are committed to the future of Australian manufacturing. BlueScope has a current annual capacity of over 3 million tonnes, ensuring we can respond to local market needs without the risks of global shipping delays or currency fluctuation.

We are continually investing in our capability, including:



$1B+

Blast furnace reline project to ensure continuing domestic steel production.



$300M+

Plate mill upgrade to increase capacity and improve quality.



$145M

Metal coating line upgrade to increase capacity.

Image credits: Aldoga Solar Farm, QLD, Australia. Photos supplied by Acciona Energía.

BlueScope's role in solar projects

We support your project at every stage, delivering value from initial design through to final installation. Our team helps you integrate local supply chains into your project, gaining the benefits of a locally-supplied product and a team experienced in the Australian market.

Specification and design

We help you select the most suitable steel and coating for your specific site conditions, often preventing costly over-specification while ensuring compliance.

Product development

Our technical team collaborates with OEMs and local steel fabricators to develop and test customised steel grades that balance high strength with the ductility required for complex components.

Supply chain connection

We support and coordinate introductions to an established network of local manufacturers and fabricators, helping you enhance traceability and build a stronger, more resilient Australian supply chain.

Testing and validation

We provide rigorous testing data to validate performance, ensuring products meet your specifications. We can manufacture to relevant Australian or international standards as required.

Delivery

We utilise our national distribution network to ensure on-time delivery across Australia.

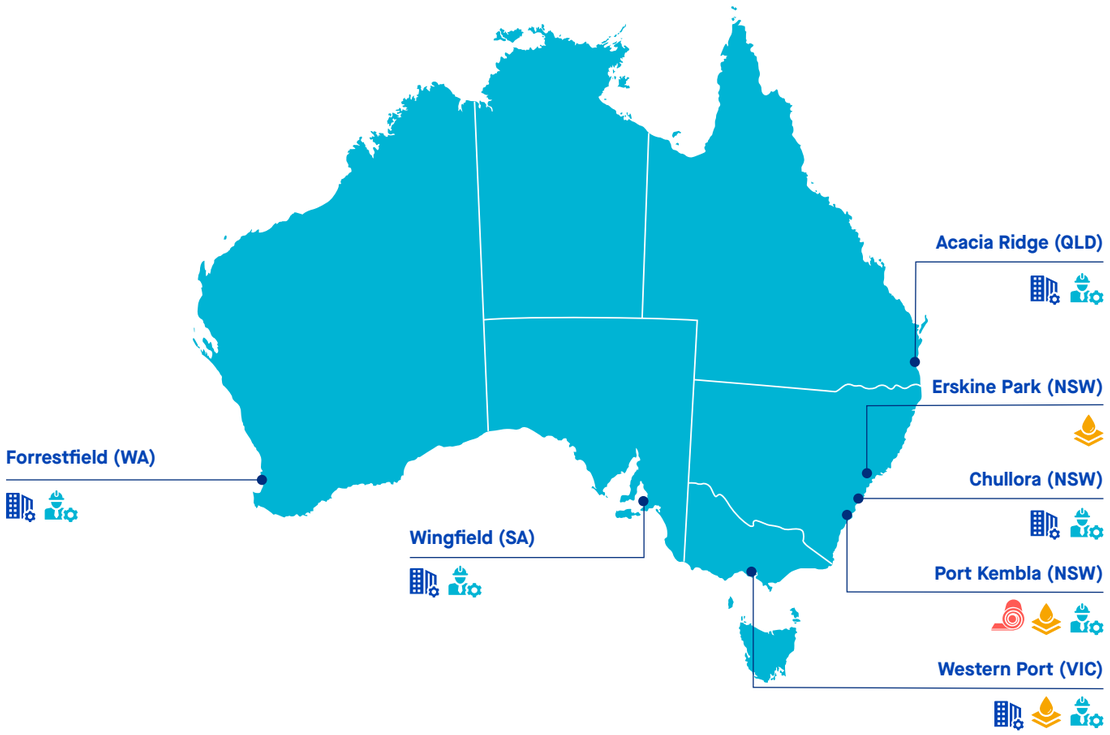
Technical support

Local technical teams across our national network assist with pre- and post-installation advice, including clarity on design lives.

A national network for solar steel solutions

BlueScope is an important enabler in Australia's solar supply chain. With manufacturing sites in New South Wales and Victoria, and a distribution network that spans every state and territory, we have the physical presence to support projects across Australia. This scale allows materials to be available where they are needed, helps mitigate global supply chain risks and means you can benefit from local responsiveness.

Legend: Steel making · Support · Distribution centres · Metallic coated manufacturing



Our reach extends beyond just manufacturing and delivering steel. As we are on the ground in every major region, we can help connect you to a thriving network of suppliers, fabricators, Original Equipment Manufacturers (OEMs), and Engineering Procurement Contractors (EPCs) who work together to deliver quality end-to-end solutions. Whether you need a special fabricator for torque tubes, supporting components or a partner for structural piles, the Australian market can offer a local solution. The projects we have been part of demonstrate this supply chain in action.



Supply chain case study

Fulham Solar Farm and Battery

Image credits: Fulham Solar Farm, VIC, Australia. Photos supplied by PVH.

Steel manufacturer
BlueScope

Distributor
Steelforce Distribution

Manufacturer/Fabricator
Austube Mills,
Precision Oxycut

OEM
PV Hardware

Tracking System
AxoneDuo Infinity

Project Developer
Octopus

EPC Manager/Contractor
Gransolar

BlueScope manufactured and supplied steel for Fulham solar farm and battery – located in Fulham, Victoria – for torque tubes and bracketry. We also provided a custom-developed steel grade tailored to meet specific project requirements.

BlueScope's role in supply chain:

- Customised steel grade
- Technical support
- Corrosion site assessment
- Specified steel for Australian conditions
- Provided solutions to meet required specifications and standards
- Facilitated technical solution development
- On-time, quality delivery
- Product development support
- Coating mass solution

A supplier backed by experience

The performance of your solar asset depends on the integrity of its steel components. BlueScope provides a high level of technical certainty for the Australian market.

Engineering reliability

We prioritise quality assurance to ensure our products are trusted to perform in the long-term.

Thickness accuracy

Our engineering is based on Base Metal Thickness (not Total Coated Thickness).

Quality management

Port Kembla Steelworks operates a quality management system certified to ISO 9001. This drives efficiency, reduces defects and supports the consistent delivery of reliable, high-quality products.

Traceability

All our products are fully traceable back to production, providing a transparent chain of custody for your asset registers.

Testing

BlueScope products are specifically designed and tested in Australia for Australian conditions. Our products are backed with rigorous analysis.

Certified laboratories

Our internal testing laboratories are NATA (National Association of Testing Authorities) accredited.

Comprehensive analysis

Our testing regime includes mechanical (tensile) testing and coating mass analysis.

Verification

Material Test Certificates can be provided upon request.



Image credits: Aldoga Solar Farm, QLD, Australia. Photos supplied by Acciona Energía.

Design life and warranty

We understand that maximising return on investment relies on asset longevity. BlueScope offers design life assessments based on the proven performance of our products in Australian environments.

Broad coverage

Design life assessments are available for most Australian locations, covering up to approximately 95% of the country.

Site-specific assessment

Our technical team can analyse unique environmental factors, such as soil corrosivity or salt spray, to recommend the optimal steel grade and coating mass.

Clear expectations

We provide a clear expectation of intended product performance, backed by a technical team with decades of experience in the field.

Warranty support

Eligible projects may also be backed by a BlueScope warranty, providing the security of a guarantee from a local manufacturer, subject to application and eligibility criteria[1].

[1] For full terms and conditions and to determine the eligibility of your project for a warranty visit bluescopesteel.com.au/warranties or call BlueScope on 1800 800 789. Warranties provided by BlueScope do not affect consumer rights under the Australian Consumer Law.

Standards and compliance

Every product of BlueScope manufactured steel is guaranteed to meet the relevant Australian Standards or required specifications.

Product standards

Australian standard listed products comply as follows:

- Metallic coated products comply with AS 1397:2021.
- Hot rolled strip products comply with AS/NZS 1594:2025.

We can manufacture to comply with international product standards as relevant.

Independent accreditation

We certify compliance with many independently established organisations, including:

- Our Australian manufacturing operations are certified to ISO 9001:2015 for Quality Management Systems and ISO 14001:2015 for Environmental Management Systems.
- For hot rolled strip products:
  - ACRS.

Traceability

Every BlueScope product can be fully traced back to the point of production, demonstrating our commitment to transparency and accountability.

Full product traceability

Unique heat, slab, plate and coil numbers allow tracking of each product back to its original batch.

Compliance

Traceability and testing in our processes confirm that steel products meet applicable standards, providing assurance of quality and performance.

Reliable certification

Test certificates detail chemical and mechanical properties, offering customers documented proof of compliance and product integrity.

Upgrades and customisation

Traceability enables customers to verify suitability for upgrades or higher strength requirements, with clear documentation of grade and testing history.

Global laboratory accreditation

Testing in NATA-accredited labs ensures data integrity and international recognition, enhancing customer confidence in product quality.



Supply chain case study

Aldoga Solar Farm

Image credits: Aldoga Solar Farm, QLD, Australia. Photos supplied by Acciona Energía.

Steel manufacturer
BlueScope

Distributor
BlueScope Distribution

Fabricator
Orrcon Manufacturing

OEM
Nextpower

Tracking System
NX Horizon

Project Developer
Acciona Energía

EPC Manager/Contractor
Acciona Energía

At the Aldoga solar farm near Gladstone, Queensland, BlueScope tailored a steel grade for torque tubes, while also playing an active role in aligning supply chain partners.

BlueScope's role in supply chain:

- Customised steel grade
- Technical support
- Corrosion site assessment
- Specified steel for Australian conditions
- Provided solutions to meet required specifications and standards
- Facilitated technical solution development
- Facilitated introductions to supply chain partners
- Product development support
- Coating mass solution
- On-time, quality delivery

Leading with transparency and stewardship

BlueScope's commitment to sustainability is a fundamental theme in our purpose, and is central to our bond and our strategy, which define the way we develop, manufacture and sell steel products and solutions.

Our purpose is to create and inspire smart solutions in steel, to strengthen our communities for the future. When you choose BlueScope, you're choosing a supplier committed to driving sustainable outcomes for its customers.

Responsible™ Steel | standards & certification

Responsible manufacturing

BlueScope's Port Kembla Steelworks in New South Wales and Western Port Works in Victoria are both certified to ResponsibleSteel™ Standard Version 2.1. ResponsibleSteel™ is a global multi-stakeholder standard and certification programme that governs a wide range of topics, including:

- Corporate leadership
- Social, environmental and governance management systems
- Occupational health and safety, labour and human rights
- Stakeholder engagement and communication
- Local communities
- Climate change and greenhouse gas emissions
- Noise, emissions, effluents and waste
- Water stewardship and biodiversity
- Decommissioning and closure.

Our ResponsibleSteel™ certification provides solar fabricators and developers with confidence that they are specifying steel from a facility that has demonstrated responsible sourcing and production practices.

Product stewardship

BlueScope products are designed to support durability and longevity in use. When reuse is not possible, the steel in our products is 100% recyclable.

We're also aiming to boost our participation in the circular economy by increasing the amount of recycled content in our steel. Across the range of steel products manufactured by BlueScope in Australia, the average recycled content in the steel is approximately 24%[2].

Decarbonisation

We are committed to, and transparent about, our decarbonisation journey. BlueScope has a goal to reach net zero globally by 2050[3], and we publish mid-term emissions targets.

To help customers and partners make informed decisions, our environmental credentials are laid out in Environmental Product Declarations for many of our products. These are based on comprehensive Life Cycle Assessments.

worldsteel
ASSOCIATION

Industry leadership

BlueScope is an active member of the Worldsteel Association. In 2025, BlueScope was recognised as a Steel Sustainability Champion. The Steel Sustainability Champions Programme commends worldsteel members that are most clearly demonstrating their commitment and action to sustainable development. This distinction involved meeting rigorous standards including providing evidence of meeting 20 ESGE criteria, submitting life cycle inventory data, and signing the worldsteel Sustainability Charter.

We also participate in the worldsteel Climate Action data collection programme, which involves reporting our CO_2 emissions data on a site and company level. The program enables individual steel plants to compare themselves against average and best performance to identify their opportunities for improvement. BlueScope has received a certificate recognising our participation in worldsteel's CO_2 data collection program since 2007.

For more information on our sustainability credentials visit **steel.com.au/sustainability**

[2] Recycled and recovered content classifications follow ISO 14021:2016. The figures provided are based on FY25 data. For the most current information visit https://bluescopesteel.com.au/sustainability/circularity/recycled-content.

[3] Achieving the 2050 net zero goal is highly dependent on several enablers, including; the development and diffusion of ironmaking technologies to viable, commercial scale; access to internationally cost-competitive, firmed large-scale renewable energy; availability of competitively priced green hydrogen with natural gas enabling the transition to green hydrogen; access to appropriate quality and sufficient quantities of economic raw materials; and supportive and consistent policies across all these enablers to underpin decarbonisation.

Product solutions

BlueScope provides a comprehensive range of steel products suitable for most modern solar designs, including fixed-tilt and single-axis tracking systems.

We can assist with steel solutions for:

Torque tubes

Other structural components:

- Piles
- Posts
- Piers

Infrastructure:

- Electrical infrastructure
- Site fencing

Mounting:

- Brackets
- Mounts
- Clamps
- Panel rails
- Panel struts
- Tracking system components

Metal-coated products

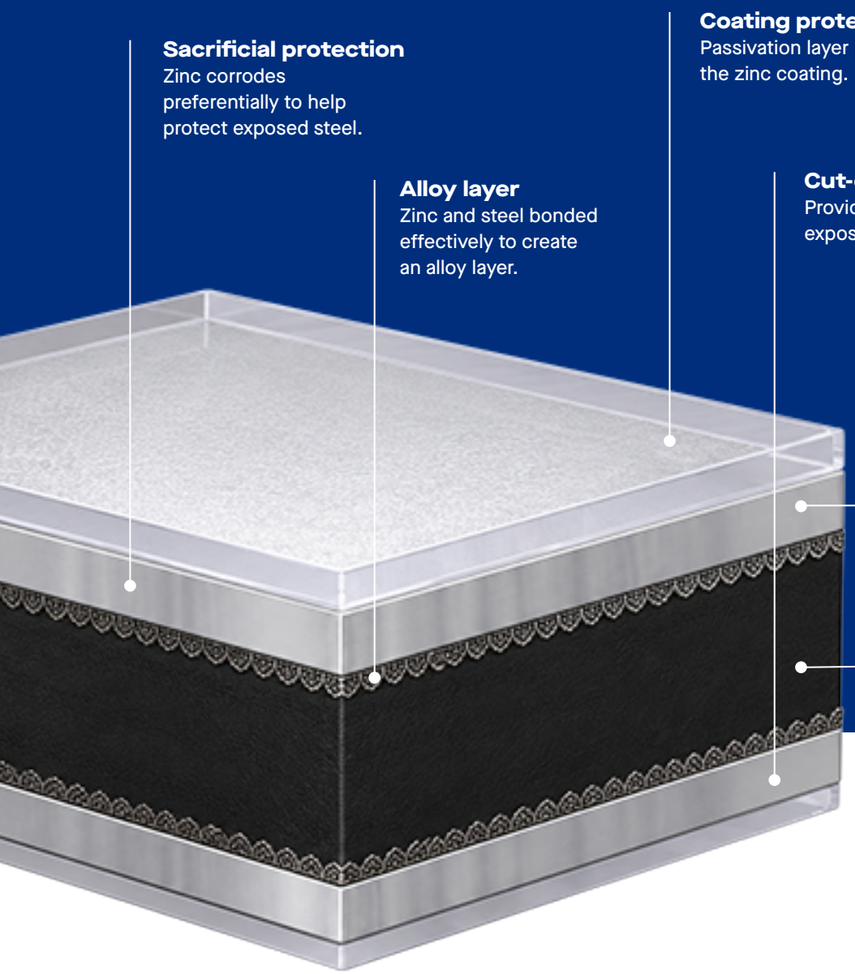
BlueScope metal-coated steels are typically used in solar applications for torque tubes, structural components, mounting, and fastening components.

Our metal-coated products:

- Are suitable for most of Australia, from rural, to bushland and arid zones, through to urban and light industrial zones C1, C2, C3.
- Comply with AS 1397:2021 for base metal and coatings, with product tolerances aligned to AS 1365:1996 or relevant customer specifications.
- Are manufactured at sites certified to ISO 9001:2015 Quality Management System.
- Are zinc-coated, available as Z275, Z350 or Z450.
- Are recommended based on actual performance in Australian climate zones, and customisation and grade and coating variations can be requested.
- Can be product-matched to international standards upon request.
- Have data sheets and EPDs available upon request.
- Are made at a site certified by ResponsibleSteel™ Standard Version 2.1.
- May come with a design life upon application.
- Are BlueScope-branded.

BlueScope zinc-coated steel performance

Designed for long life in Australian conditions since 1961.



Proven performance based on decades of real-world use and exposure testing sites in Australia.

Solutions aligned to Australian standards and conditions.

Provide both barrier and sacrificial protection including at cut edges.

Consultative support to match products to site conditions and required standards.

Proven solutions for approximately 95% of utility-scale solar farm locations in Australia, based on extensive evaluations.

Design Life Statements may be available upon request.

The table below demonstrates some of the common BlueScope coated products used for solar applications.

BlueScope product name	Min Lower Yield Strength (MPa)	Min Tensile Strength (MPa)	Min Total Elongation % (80mm Gauge length)	Min Total Elongation % (50mm Gauge length)
ZINCFORM® Steel G350	350	420	14	15
Data sheet here | EPD here				
ZINC HI-TEN® Steel G450	450	480	9	10
Data sheet here | EPD here				
ZINCFORM® Steel G410H	410	480	14	16
Data sheet and EPD available upon request.[4]				

Please contact BlueScope for other product variations and customisation requests.

[4] Product offering current as at 10/07/26. Please contact BlueScope for current product availability.



Image credits: Glenrowan Solar Farm, VIC. Photos supplied by ARRAY Technologies.

Hot rolled strip products

BlueScope hot rolled strip steel products are commonly used in solar applications such as piling and structural components that require post-coated heavy zinc coatings, protected edges, or immersion in soil. These applications often require a thicker base metal, where the strength, weldability, and galvanising performance of hot rolled grades are especially beneficial.

Hot rolled strip steel products:

- Specified products are suitable for hot dip zinc coating used in piles and components.
- Can be developed to comply with Australian standards, international standards or customer specifications.
- Offer customisation options upon request.
- Can be product-matched to international standards upon request.
- Have data sheets and EPDs available upon request.
- Are made at a site certified by ResponsibleSteel™ standard version 2.1.
- Are ACRS certified.
- May come with a design life upon application.

Hot rolled strip steel products are available in a range of analysis, structural, and formable products with custom thicknesses, widths, and length options.

The table below demonstrates some of the BlueScope hot rolled strip steel products commonly used for solar applications.

BlueScope product name	Min Lower Yield Strength (MPa)	Min Tensile Strength (MPa)	Min Total Elongation % (80mm Gauge length)	Min Total Elongation % (50mm Gauge length)
HA350	350	430	16 (<=3mm), 20 (>3mm)	18 (<=3mm), 22 (>3mm)
Data sheet **here** | EPD **here**				
S550MC	550	600	12 (<=3mm), 14 (>3mm)	12 (<=3mm), 22 (>3mm)
Data sheet and EPD available upon request.				
XTRAFORM® Steel 400	380	460	23	25
Data sheet **here** | EPD available upon request.				

Please contact BlueScope for other product variations and customisation requests.

Talk to BlueScope about how our steel products can be aligned with international product standards or required specifications for your solar application.

Choosing a quality solution

We know that choosing the right partners is critical to the success of any project. Using these easy checks can help minimise your risk when it comes to selecting a quality solar solution.

1

Look for ResponsibleSteel™ certification and sustainability credentials.

2

Look to BlueScope when you need a customised solution. Our team has extensive experience working with businesses across various industries to develop tailored steel solutions — including custom grades, coating mass, and component-specific designs. Whether your project requires unique performance characteristics or non-standard specifications, we're here to help you find the right fit.

3

Benefit from local technical and sales support available across Australia, throughout your project lifecycle.

4

Check your product delivers your expected design life. BlueScope can advise on product quality, durability and long-term performance in Australian conditions.

5

Request BlueScope products to know you're getting Australian-made steel for Australian conditions.

6

Ask us to help confirm you've chosen the appropriate mechanical properties to suit your specific application. Selecting the right combination of strength and elongation optimises performance and durability.

7

Confirm you've chosen the correct coating type and thickness based on environmental exposure and project requirements. Our team is available to assist with coating selection for long-term corrosion protection.

8

Verify that product tolerances and specifications conform to relevant Australian standards for consistency, safety, and reliability in performance.

9

Select materials that are fit for purpose and suited to Australian conditions. Avoid over-specification, which can lead to unnecessary costs and complexity without added benefit.

10

Ask for traceability certificates to confirm the origin of materials.



1800 800 789
Contact BlueScope Steel Direct

steel.com.au
BlueScope product information and library and more information about BlueScope's solar products and renewable energy team.

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