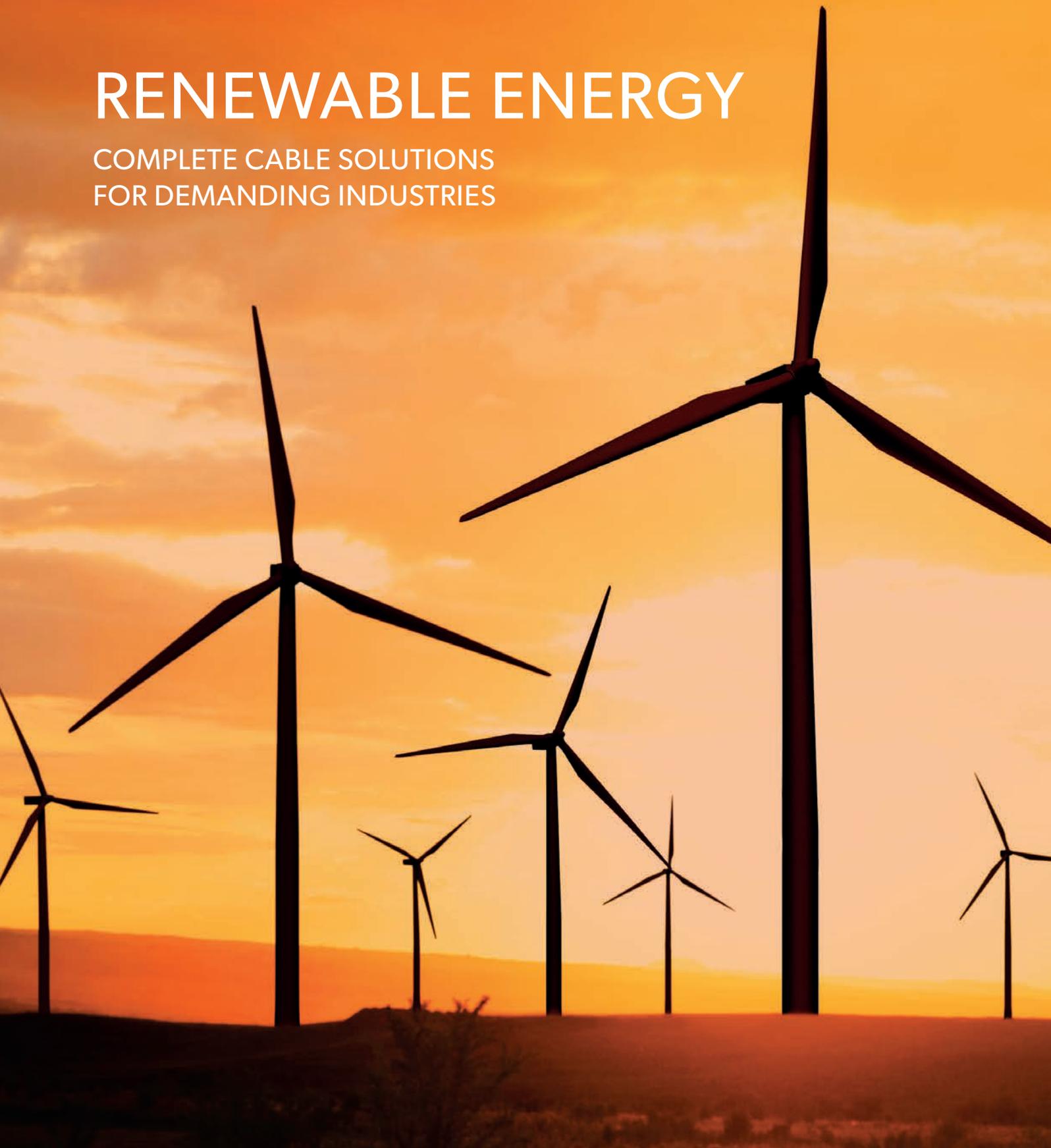


ELAND[®]
CABLES

RENEWABLE ENERGY

COMPLETE CABLE SOLUTIONS
FOR DEMANDING INDUSTRIES



CONNECTING RENEWABLE ENERGY PROJECTS

Renewable sources are being harnessed to deliver our increasing demands for energy and reduce our reliance on fossil fuels. Solar, wind, hydro and biomass projects around the world are powering industry, and our cables are integral to their efficient energy production.

A tailored service on a global scale

SOLAR

The misconception for many is that solar power requires direct sunshine – it's more about daylight hours and clear skies (although there's no denying the sun helps!). Large-scale solar farms are common sights around the world, with additional uptake from companies and private homeowners alike keen to offset their energy costs and benefit from feed-in tariffs. Equipment and installation costs are declining as mass adoption is now a reality.

ONSHORE & OFFSHORE WIND

Wind turbines are getting bigger and taller, generating more power output but in turn requiring more space to prevent turbulence interference. These quiet giants are now a familiar sight in Northern Europe, North America and China, with offshore farms still smaller in number than their land-based equivalents but benefiting from a more consistent speed and direction and therefore higher per-turbine production return.

TIDAL

Tidal may not be as widely used as other renewable energy production sources but for geographically-gifted locations it can offer sizeable returns. The creation of artificial breaks, harbours and reefs can also provide the conditions required for effective tidal energy harnessing.

HYDROELECTRIC

Hydroelectric is currently the largest renewable energy production source, in the main due to the large-scale adoption in China, but also generates around 90% of Norway's power demands. Whether adopting Run-of-River (ROR), Pumped Storage Hydroelectricity (PSH) or Reservoir Hydro Power (RHP) it is a consistent source of renewable energy that is not dependent on the changing weather.

BIOMASS

Biomass is becoming more popular as countries look to their natural resources in innovative ways. The repurposing of what would otherwise be a low-cost crop of disposable by-product is helping feed substantial amounts of energy into grid networks around the world. Whilst once wood was popular, now livestock manure and agro-food waste are being utilised, and the biofuel, biogas and biowaste industry is big business.



It starts with the cable but there's much more to it. We adapt the specification to the system, installation design, environment and the country regulatory requirements.

One size and solution does not fit all.

Our portfolio covers applications across low and medium voltage power, instrumentation, data, and control cables, manufactured to British, European and international standards.

We can support your project with cables that are:



UV RESISTANT

Cables for external installation need protection from the sun's UV radiation to prevent sheath breakdown. The level of protection can be tailored to the geographic location.



WATER RESISTANT

Water resistant sheathing materials and waterblocking protection for cables laid either intermittently or permanently in water, both potable and saline.



IEC STANDARD

Specifying international standards can help future-proof your renewable design, allowing for easier access to cables for both ongoing maintenance, expansion projects, and cross-border projects.



UK DNO APPROVED

G81-approved Distribution Network Operator medium voltage cables are required for the UK energy grid and for connection to private networks.

TRUSTED TO CONNECT

Please see our website for the wider portfolio and technical specifications, or speak to one of our team about the cables needed for your specific project and application.

Creating the grid network **POWER DISTRIBUTION**



UK DNO-APPROVED and BS7870-4.10 - 11kV & 33kV

G81-manufacturer cable conforming to UK Distribution Network Operator requirements. Medium Voltage 11kV (single core, triplex and 3-core) and 33kV single core cables. Suitable for installation in sealed ducts. Non-DNO specific and LV Waveform cables also available..



BS 6622 (PVC) and BS 7835 (LSZH) - 6.6kV to 33kV

Single core AWA or multi core SWA armoured Medium Voltage power cable suitable with Class 2 stranded copper conductors (aluminium also available). Suitable for direct burial. CPR Compliant.



N2XS2Y / NA2XS2Y (MDPE) IEC 60502-2 - 6kV to 30kV

Single core and three-core unarmoured Medium Voltage power distribution cable for external installation. Available with optional longitudinal and/or radial waterblocking protection.



N2XSY / NA2XSY (PVC) and N2XSH / NA2XSH (LSZH) IEC 60502-2 - 6kV to 30kV

Single core and three-core unarmoured Medium Voltage power distribution cable for internal/external installation. CPR Compliant.



BS 5467 (PVC) and BS 6724 (LSZH) - 1kV to 3.3kV

Low voltage AWA and SWA armoured power cables. Class 2 stranded copper cores with single core to 1000mm² and multi-core to 400 mm². Also available with aluminium conductors. BASEC Approved. Suitable for direct burial. CPR Compliant.



N2XY / N2XH (COPPER) AND NA2XY / NA2XH (ALUMINIUM) (PVC / LSZH) IEC 60502-1 - 0.6/1kV

Low voltage European power cable with Class 1 solid (to 25mm²) or Class 2 stranded conductor. Single core and multi core configurations. Not suitable for direct burial. Variants with EMC screening also available. CPR Compliant.



NYY (COPPER) NAYY (ALUMINIUM) IEC 60502-1 - 0.6/1kV

Insulated and sheathed single core or multi-core power cable available with or without green/yellow earth wire (-J or -O). Widely used in European installations, suitable for use indoors or outdoors and in concrete. CPR Compliant.



N2XFGbY (COPPER) (PVC) IEC 60502-1 - 0.6/1kV

XLPE insulated, PVC sheathed low voltage cable with dual mechanical protection from flat steel wires and galvanised steel tape. Suitable for installations subject to higher tensile stresses. CPR Compliant.

Connecting equipment **LOW VOLTAGE POWER**



RZ1-K/ARZ1-K (COPPER/ALUMINIUM) (LSZH) IEC 60502-1 - 0.6/1KV

Flexible power cable for internal fixed installation and underground (protected) supply networks. CPR Compliant.



N2XH FLEX ENHANCED (COPPER) (LSZH) IEC 60502-1 - 0.6/1kV

Custom designed by The Cable Lab®, this halogen-free cable offers enhanced flexibility & improved strippability to aid swift installation into compact and restricted spaces, saving time & effort. CPR Compliant. BSI Kitemark tested.



H07ZZ-F (LSZH) (RUBBER) 450/750V

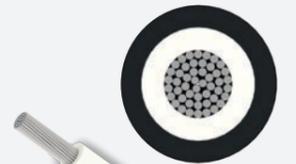
Robust multi core cable offering flexibility with LSZH rubber sheathing for applications under moderate amounts of stress. CPR Compliant. BSI Kitemark tested.



H07RN-F AND H07RN8-F (RUBBER) 450/750V

Heavy-duty EPR insulated flexible rubber cable for trailing power applications under moderate mechanical and thermal stresses. H07RN8-F suitable for permanent submersion in water to 10m. H07RN-F is CPR Compliant.

Connecting equipment **SPECIALIST APPLICATIONS**



PV H1Z2Z2-K AD8 PHOTOVOLTAIC 0.6/1KV

Photovoltaic (PV) cables intended for interconnecting power supplies within renewable energy photovoltaic systems such as solar panel arrays in solar energy farms, including where water is present (AD8 rated). Sizes from 2.5mm² to 240mm², suitable for domestic and industrial applications. CPR Compliant.



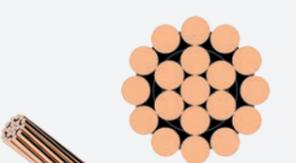
DRINCABLE 800

Suitable for permanent submersion in potable water up to a depth of 800m. Can be used where improved chemical and abrasion resistance is required. Cables suitable for submersion to alternate depths, or for use in saline water, also available.



TORSION RESISTANT TURBINE TOWER & ROTOR POWER

Low and Medium Voltage power cables suitable for onshore and offshore wind turbines, offering mechanical protection, resistance to torsional stresses, and environmental conditions.



BARE EARTH

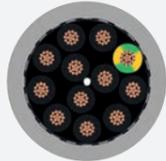
19-strand Class 2 bare copper conductor for route-to-earth connection.

System operations CONTROL



VERIFLEX® YY YSLY (PVC) and HSLH (LSZH)

Flexible unscreened LSZH cable for power and signal transmission available in conductor cross-sectional area sizes of 0.5mm² and above. Multi-core cable also available as a 0.6/1kV power supply. CPR Compliant. BSI Kitemark tested.



VERIFLEX® CY YSLCY (PVC) and HSLCH (LSZH)

Flexible cable with tinned copper wire braid screen for electromagnetic compatibility in control and regulation applications. Also available as screened bedded CY control and in 0.6/1kV voltage for power supply. CPR Compliant. BSI Kitemark tested.



VERIFLEX® SY YLSY (PVC)

Flexible cable with additional inner sheath and steel wire braid to offer mechanical protection for control and regulation applications. CPR Compliant. BSI Kitemark tested.



VERIFLEX® 2XSLCH SERVO (LSZH)

Flexible 1kV power cable with tinned copper wire braid screen for electromagnetic compatibility for use in the quick connection of Computer Numerical Control (CNC) machines, intelligent servo drives and temperature control units. CPR Compliant. BSI Kitemark tested.

System operations DATA & SIGNAL TRANSMISSION



LIYY / LIHH AND LIYCY / LIHCH (PVC/LSZH)

European industrial cable for internal data and signal transmission applications. EMC screened variations available. Class 5 flexible multi core cable available in multicores up to 30 cores as standard and from 0.14mm² upwards. CPR Compliant.



VERIFLEX® PROFIBUS PA and PROFIBUS DP FC L2/FIP (PVC/LSZH)

A fieldbus standard that supports a wide variety of Profibus PA (process Automation) and DP (Decentralized Peripherals) applications in automated manufacturing. CPR Compliant. BSI Kitemark tested.



VERIFLEX® PUR INDUSTRIAL ETHERNET

Suitable for Profinet B and Cat7 applications. Backwards compatible, for dry and damp environments, the PUR sheath offers resistance to oils, chemicals, abrasions and tears. Other LAN cables including Cat6a available. CPR Compliant.



FIBRE OPTIC

Loose tube and tight buffered optical fibre cables of up to 48F. Available as single/multimode and with various degrees of mechanical protection. Also available with steel tape armour for outdoor duct installation or direct burial with full rodent protection. CPR Compliant.

CASE STUDIES

We're proud to be involved in major renewable energy industry projects all around the world. A few are highlighted here.

ØRSTED
UK

Blowing a gale off the coast

PROJECT SCOPE:

Construction of the world's largest offshore wind farm, Hornsea 1, in the North Sea, with 174 Siemens Gamesa 7MW turbines and 3 offshore substations.

REQUIREMENT:

LV & MV Power, Data, Instrumentation and Control cables for turbine operations.

ELAND CABLES' SOLUTION:

Cable design customised by The Cable Lab to reflect the offshore/salt-water exposure (airborne), with additional technical specification support provided from project outset.

Cables were fully tested in our UKAS laboratory before being installed in turbines which in turn are connected to a shore-based process-up plant. First turbines commissioned and delivering power to the UK grid since February 2019.

“

We are always pleased with the service from Eland Cables. Fast response, exact delivery dates, complete documentation, and their ability to help with urgent or large orders makes Eland an excellent company to work with.”

SIEMENS



TRUSTED AS EXPERTS

Technical experts and Industry specialists combine to work with you.

Our project support services are focused on adding value to your project, delivered by an experienced team. We work in partnership with consultants and electrical contractors to carry out a build that's run against agreed project milestones.

By working with experts in their field you have access to the information you need to keep the project on-track.



TECHNICAL SUPPORT

Our technical experts are on hand at every stage, from specification to completion, to provide answers to your cable questions. With strong manufacturing backgrounds they now sit on national standards bodies and committees and can advise on the suitability of a cable across matters of construction, electrical design and compliance.



INDUSTRY BEST PRACTICE

Specialists give guidance based on their real-world experience of projects, with guidance ranging from installation challenges to future-proof solutions.



PROACTIVE PROJECT MANAGEMENT

Our dedicated project team use all their experience to ensure your project runs smoothly, providing the support, flexibility and reactive approach that makes us the partner of choice on large-scale multi-phase builds.



TRUSTED TO PERFORM

Quality and Compliance are key to minimising unplanned maintenance and downtime.

Our high quality, high performance cables face the strictest quality assurance processes, backed by cable testing in a world-class UK laboratory. We take our responsibilities as cable experts seriously and do all we can to ensure only quality, compliant products are available in the marketplace, including offering compliance testing on third-party cables.

It means you can have total trust that your cables and accessories meet the highest standards.



INDUSTRY-LEADING QUALITY ASSURANCE

Rigorous quality checks ensure our cables are in optimum condition to be despatched to you. From audits of our manufacturing partner sites to the inbound goods testing and pre-export checks, we tightly control the cables and accessories we supply.



TESTING IN THE CABLE LAB®

Our on-site ISO/IEC 17025 and IECCE CBTL accredited laboratory tests cables, providing consistent, impartial results to determine quality and compliance. Extensive capabilities include vertical flame testing, tensile & elongation, properties after ageing, and UV Weathering.



BSI KITEMARK™ TESTING

Described by BSI as 'a new benchmark in cable compliance' this in-depth testing certifies the performance safety standards of the cable. Takes specific manufacturing runs across core and size configurations for a globally-recognised third-party mark of quality.



"As the first company to achieve the BSI Cable Testing Verification Kitemark, Eland Cables sets a new benchmark in cable compliance. The rigorous and extensive testing programme they undertake in their UKAS laboratory, under our ongoing surveillance, tests the cables to British and international standards for key safety criteria and by certifying their cables against the scheme, Eland Cables can demonstrate that its cables meet the highest standards."

bsi.

TRUSTED TO DELIVER

Logistics that reflect your order and your site is a key part of customer service

Our project support services are focused on adding value to your project, delivered by an experienced team.

We work in partnership with consultants, electrical contractors, and end users to carry out a build run against agreed project milestones.

You need to work with a team who takes responsibility; that can be flexible, and who understand that getting the right cable to the right place at the right time is paramount to success. You need to work with experts in their field so that you have access to the information you need to keep the project on-track.



DEDICATED TRANSPORT TEAM

We'll deliver your cables where and when you need them. Phased and planned just-in-time deliveries can be supplemented by ad-hoc requirements.



FORS SILVER ACCREDITED FLEET

Our modern Euro6 fleet of articulated and rigid trucks, and specialist unloading vehicles, are FORS Silver accredited. Our Transport Compliance team and JAUPT accredited driver school ensure our drivers remain up-to-date with all certifications, and our maintenance workshop keeps our vehicles in prime condition.



SITE ACCESS AND FULL TRACEABILITY

Our drivers can complete site access training where needed. They are connected and in constant contact with our transport team, allowing up-to-the-minute location tracking for site ETAs and instant PODs.



GREEN ROUTES, BIOFUELS & EVS

With EVs and HGVs running on biofuels making deliveries using green route planning, our logistics are a key part of our sustainable operations commitment.





TRUSTED FROM END-TO-END

Quality means seamless installation with accessories

It's essential that your cable accessories are sized correctly - it can have a significant impact on the time and ability to terminate the installation. We manufacture the cables to stringent tolerances so that accompanying accessories are matched accordingly.

Quality matters with cable accessories too so our portfolio is subject to the same rigorous QA procedures as our cables. Our premium brand accessories deliver the assurance of electrical integrity from start to finish.



CABLE GLANDS

Our nylon, brass and nickel-plated glands provide high quality connections. Includes glands for braided, armoured and EMC screened cables. Rated IP68 and IP69K.



CABLE CLEATS

Support your infrastructure with our premium range of cleats, available in stainless steel or LSZH for public or enclosed spaces. Trefoil and Quad formation cleats also supplied.



CABLE LUGS

Create secure terminations with our copper lugs. Long palm and dual hole fixings available to suit the installation needs. Cable terminations (cord end terminals) also supplied.

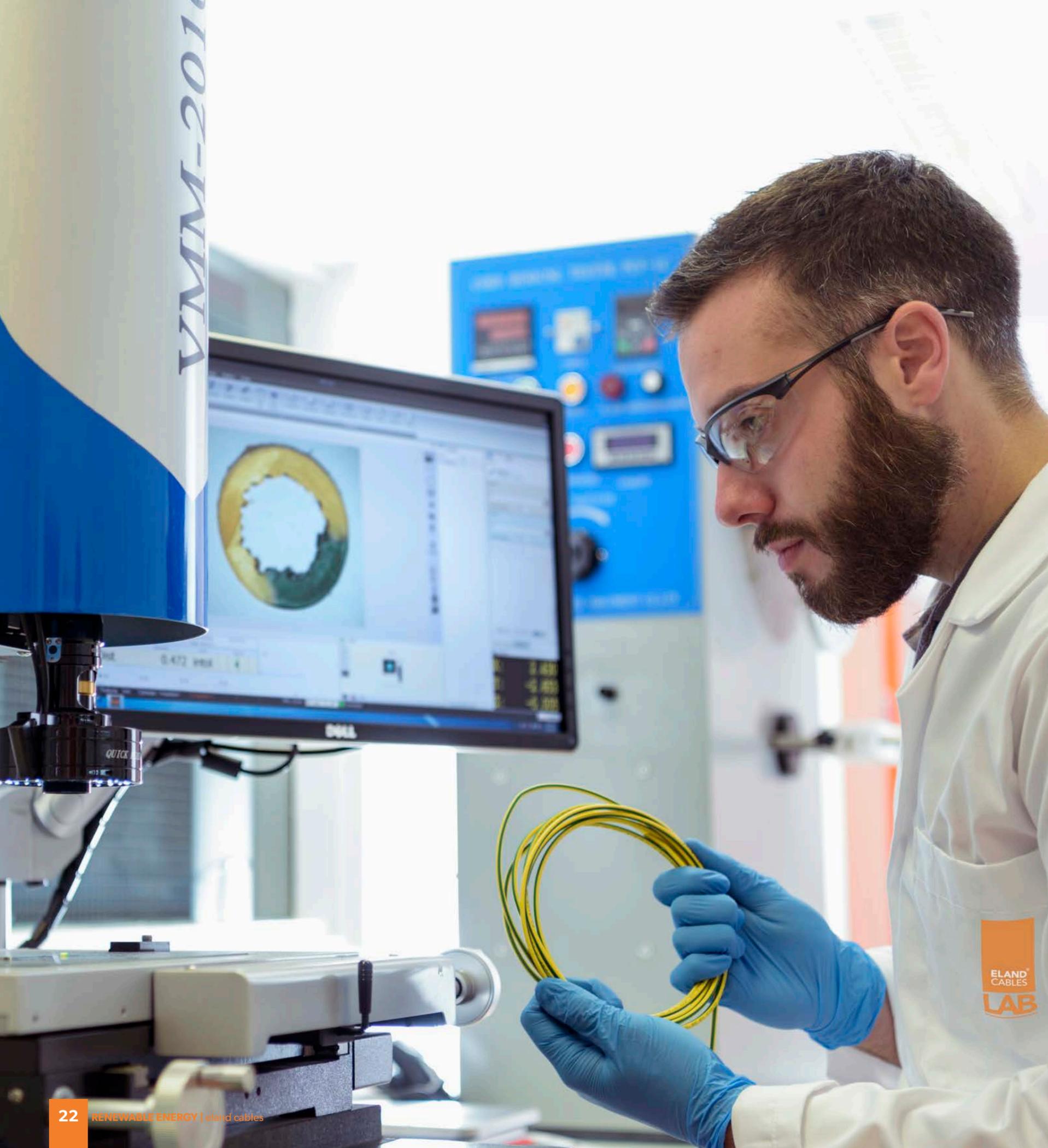


CABLE ASSEMBLIES

Designed against specific installation plans, pre-cut lengths of cable complete with chosen connector or termination can be supplied when large quantities of the same construction are required.



Other cable accessories also available. Accessories can be tailored to meet specific installation demands. Please speak to the team for more information.



TRUSTED TO FIND A CUSTOM SOLUTION

For when you need something different

Sometimes an off-the-shelf cable isn't right. We can design, manufacture and test a cable that works for your installation.

Whether it's adapting an existing cable or designing from scratch to your unique specification, we can provide the cable that works for you. Designed by our technical experts to relevant standards, it is manufactured then tested in The Cable Lab®.

It might be you need additional water-blocking properties, an extra layer of screening, or mechanical protection from armour; re-sheathing or over-sheathing can adapt a cable to the installation environment; or you may need to design a composite cable running power and data to fit the installation space available.

Geo-specific cable approvals and certifications are sometimes required for installation compliance. Where required, we can support submissions for third-party certifications and regulatory compliance as needed.

Whatever the requirements, we'll supply the new cable meeting your precise needs with speed and efficiency.



TRUSTED TO CARE

Making green commitments that benefit everyone

We must all consider our impact on the environment. We're on a journey to Net-Zero, making positive changes that minimise our carbon emissions.

Amongst the changes there are solar panels installed at our operations sites, generating as much electricity as we consume annually. Our fleet of HGVs use biofuels and we have EVs too. All our packaging is recyclable or biodegradable; we can collect empty drums to reuse or recycle; and we can even recycle your legacy and waste cables at our recycling facility. We're supporting carbon-reduction initiatives throughout our supply chain.

We've committed to the Science Based Targets Initiative, we are signatories to the United Nations Global Compact Sustainable Development Goals, and we hold Silver Medal status with Ecovadis.

Our customers understand that Quality is key to being Green: The right specification to match the system and environment, with quality verified, can extend the cable lifespan.

It's all part of our wider ESG commitments that focus on Sustainable Operations - talk to our team for more information about how our efforts benefit your project.



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

SCIENCE
BASED
TARGETS

WE SUPPORT





TRUSTED FOR COMPLETE CABLE SOLUTIONS

We're the cable supply partner the major projects work with.

The 'Eland Experience' is a combination of quality products, expert technical support, and services that add value without adding to your workload.

Our solutions are built around a collaborative approach with a team that's always available, whenever you need them. For each project we ensure quality, compliance and full traceability, meeting strict development timelines to bring systems online and projects to fruition.

We're the cable supplier the industry trusts.

Project references available upon request.

“

“Clean, renewable energy is essential to meet our growing power demands, but it requires a robust, reliable cable network to efficiently distribute and a network of high performance cables to transmit data, control systems and monitor operations.

Quality and performance matter greatly if we're to effectively harness these energy sources.”

Ivan Cleere, Head of Technical/QA



**ELAND[®]
CABLES**



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