

YOUR LIGHTING & ENERGY SAVING PARTNER





TCI headquarters, Saronno - Italy

TCI is a dynamic and fast growing Italian company focused on customer satisfaction and market trends.

For more than 40 years we have been able to anticipate, adapt to and even drive the market changes. Experience and reliability are the keys to our success.

Innovation is our driving force. We provide our customers with constantly updated products: LED DRIVERS, IOT & WIRELESS CONTROL SYSTEMS, LED MODULES, LEDs, COBs, LENSES and CUSTOMISED SOLUTIONS.

We strive to be more than a reliable **supplier**: we want to be a valuable **partner** for all our customers.



Compound Cobrands

CEO - Chief Executive Officer

PARENT COMPANY

TCI is an international leader in the production and distribution of electronic components for lighting. For 40 years we have been developing and producing a wide range of products of the highest quality, 100% Made in Italy:

- LED drivers
- IoT control systems
- LED modules
- panel, inverter, battery, optimizer and interfaces solar panel systems
- vertical farm lighting technology systems
- tailor-made solutions

The business develops over an area of 50.000 square meters, which includes commercial offices, production units and warehouses, research and development laboratories, an approval department and the testing, quality control, financial, marketing departments as well as a patents office.

At the corporate level, TCI Group is made up of the holding company TCI Telecomunicazioni Italia S.r.I. The holding company holds equity investments in 5 additional associated companies.

professional led applications

TCI TELECOMUNICAZIONI ITALIA S.R.L. Via Parma 14 - 21047 Saronno (VA) - ITALY





TURNOVER EVOLUTION OF TCI GROUP



BUSINESS MODEL

Over the years, our passion for light has allowed us to constantly innovate by offering our customers products that fully meet their needs. All this has been possible thanks to our extremely dynamic and flexible business model, able to adapt to and guide the main changes in the sector. Among the several initiatives we carried out over the years there are:

- Promotion of the development and implementation of new technologies through participation in working groups like DALI, ZHAGA and COMEX.

- Development and implementation of technical solutions related to health and safety, such as the reduction of the ripple wave, that causes a plurality of ailments from simple headaches to epilepsy in the most severe cases; the ability to continuously monitor the status of the installed lighting fixtures thus avoiding to leave areas not sufficiently illuminated in the event of a fault; the use of an APP for light modulation to support the circadian cycle, really useful especially in hospitals; etc.
- Participation in all the main fairs and events to understand market trends and evaluate potential new directions for development.
 We strongly believe that having a highly defined corporate organisation represents an essential tool to realise our vision and to face present and future challenges: all our branches, our departments and offices are independent but interconnected and collaborate closely to guarantee the full achievement of all our goals.

ITALIAN TECHNOLOGY

COMPANY MISSION AND VALUES

TCI runs its business according to the principles of reliability, trust and transparency, together with innovation, courage, dynamism and quality: all key elements of our success. Corporate decisions and daily activities are carried out under the banner of our values, which guide and support us in creating shared value.

QUALITY AND RELIABILITY

TCI has always put quality first. Quality of our products: innovative, performing, reliable and compliant with the strictest international safety standards. Quality of our service: customer focus, pre- and post-sales technical and commercial support, wide range of product certifications to allow the distribution in different countries. Quality for TCI also means ethically responsible management of every aspect related to our business conduct, to truly guarantee the creation of shared value.

TRUST AND TRANSPARENCY

Trust and transparency are the basis and the guarantee of the solid relationship between our stakeholders and us. We are committed to establishing lasting and mutually beneficial partnerships based on daily dialogue with all our partners.

INNOVATION AND DYNAMISM

Our propensity for continuous innovation allowed us to grow and establish ourselves in the lighting sector by competing internationally with the main market players. TCI is a dynamic, resourceful, flexible partner dedicated to ongoing improvement.

BRAVERY

Without bravery, TCI wouldn't be where it is today. Thanks to this virtue, we have become pioneers in our sector, overcoming existing limits and putting ourselves to the test in highly challenging projects to obtain increasingly innovative products that support sustainability.



LED LIGHTING SYSTEMS



STREET LIGHTING AND CONSTRUCTIONS

- 180 m 8

In collaboration with the most important outdoor lighting, street lighting and smart city players, TCI has participated in several lighting projects for cities, highways, bridges and tunnels, in Italy and around the world. Among the most important ones is the Morandi bridge, which includes an intelligent self-adaptive lighting control system.

IOT & WIRELESS CONTROL SYSTEMS





TCI Energy was born with the desire to accompany any form of reality towards a sustainable energy autonomy, through a synergistic collaboration resulting from constant research and sector analysis.



SOLAR SOLUTIONS

TYTE



INTERFACE



OPTIMIZER

RENEWABLE ENERGY COMMUNITIES

TCI is able to offer infrastructure necessary for the creation of energy communities.

- Economic benefits
- Environmental benefits
- Social benefits
- Plant management and monitoring through interconnected wireless systems



I ITALIAN TECHNOLOGY

igrox[®] Light is life

ignox designs and produces LED technology for cultivation in controlled environment.

Our solutions contribute to elevate yield and enhance quality of crops while ensuring sustainability through our cutting edge technology.

NO IN DI SL

VERTICAL FARM & HORTICULTURE

Wireless controls available



igrox[®] lightmesh

ITALIAN TECHNOLOGY

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ICT



2000 people producing and selling Italian-designed products in China.

ITALIAN TECHNOLOGY



TCI Elettromeccanica has been manufacturing toroidal transformers for various types of production for over 20 years and has more than 80 computerized machines and qualified technicians who constantly follow the processing cycles and quality control of each product.

The evolution of the market and a different sensitivity towards the environment has led TCI Electromechanics, in synergy with the TCI Group, to develop multi-voltage toroidals, also of very high powers, suitable for powering energy-saving equipment, photovoltaic systems, inverters and LED systems.

Specific windings for civil (gate openers, opening systems for doors and windows) and industrial automations, transformers for electronics (vending, broadcasting) also complete with wiring and with diversified degrees of protection (complete electrical systems for swimming pools IP68) are to be counted among our wide production.





IOT Systems regulation

Established in 2001 by a strong team of consultants, Allix S.r.l. is a leader in the development of cutting edge IT solutions. Thanks to technologies such as MQTT and Zero Tier, along with Allix solutions, peripheral networks can be managed as a single global network. Allix is able to develop quickly and at a reasonable cost innovative apps for iOS and Android, using Microsoft Xamarin and specificly designed graphic libraries. Constant updates, tailor-made solutions and a responsive assistance make their services the best on the market.

Credit: Genoa Bridge lighting control systems project



Vertical farm lighting technology systems

Since 2015 igrox[®] helps growers improving quality and yield of crops, making it possible to have stable, fresh and local products in any seasons and under any weather conditions. Specialised in tailor made solutions, igrox[®] engineers, biologists and agronomists are always at work combining the latest technologies and high quality LED chips to provide top class, cost effective lighting solutions for plant growth in a controlled environment.





Solar panel systems

TCI ENERGY was founded to bring the experience of more than 40 years in the production of energy efficiency systems applied to the lighting sector to the photovoltaic sector as well.

Continuous research and innovation enabled us to establish ourselves immediately as a leading company in the industry.

The range of products offered includes: inverters, storage batteries, optimizers, solar panels, protection interfaces and UPS.

The offered solutions are designed to fit every kind of installation:

- residential,

- commercial,

- large-scale systems.

GLOBAL PRESENCE



TCI deeply believes in the importance of having an international presence as a way to establish solid relationships with the various markets, each one with its own specific features that must be identified and strengthened.

Thanks to our strong commercial network – made up of sales managers, sales agents and distributors – we have rapidly reached a global dimension.

EUROPE	55%
ASIA	14%
MIDDLE EAST	10%
AFRICA	8%
SOUTH AMERICA	5%
NORTH AMERICA	4%
AUSTRALIA	4%

LIGHTING PRODUCT CATEGORIES



LIGHTING PRODUCT RANGE



For over 40 years TCI has been developing and producing electronic components for lighting.

Among our wide range of products there are:

- LED DRIVERS
- IOT CONTROL SYSTEMS (Casambi, ZigBee, BLL, ZD Light, VLC, Li-Fi and Matter)
- LED MODULES
- LIGHTING CONTROL SYSTEMS

We are partner of the most important global lighting companies for which we develop drivers, LED boards, software and firmware solutions as well as special control systems.

ITALIAN TECHNOLOGY

Together we realise the most important structures and projects worldwide.

ENVIRONMENTAL COMMITMENT

"We want to give present and future genarations a sounder world"

Gianfranco Librandi

TCI is **ISO14001** certified and has a system for the collection and monitoring of environmental data.

We work everyday to fulfil our green vision

- S Developing technological solutions for a responsible, eco-efficient lighting
- Increasing the efficiency of our production processes
- Reducing production waste
- Choosing partners that are committed to sustainability
- Promoting the culture of recycling throughout our departments
- Sponsoring green initiatives and collaborating with eco-design companies



80% ECO-FRIENDLY PACKAGING









ECONOMIC AND SOCIAL COMMITMENT

TCI strongly believes in ethical business as a key to the health and stability of the international economic system, as well as the well-being and prosperity of society. This is why we have always been committed to the highest business integrity and we have worked constantly to ensure maximum transparency, collaboration and honesty with all our stakeholders.

In performing our daily activities we are focused on:

- Fair competition and communication
- Fight against corruption and bribery
- Law compliance

We are a big family that shares passion and commitment, always ready to take every opportunity to improve and innovate, thus strengthening our ability to create value over time. The well being of our people is of the highest importance to us.

Investing in corporate welfare means contributing to everybody's professional growth, boosting commitment to TCI and contributing to the development and sharing of successfull ideas.

- This is why TCI provides:
- A modern gym
- Agreements with healthcare facilities
- Fundings for professional courses
- Tickets for cultural and sports events

Discover more about our ESG management system reading our Sustainability Reports





CORPORATE STRUCTURE



A structured business organisation is an essential instrument to fulfil the company *vision*, to compete in future challanges.

TCI has established a highly defined organisational structure, made up of independent but interacting departments and offices. A team-work structure is also promoted on a larger scale to fully achieve our targets.

TCI is the sum of the experience of every employee. We are a big family, sharing passion and commitment, always ready to take any opportunity to improve our position on the lighting market.

I ITALIAN TECHNOLOGY

RESEARCH & DEVELOPMENT

Our R&D department represents the engine of TCI innovative boost. Since the very beginning, proactivity as a business attitude has been put first to fully achieve our vision.

TCI strongly believes in the cooperation with a plurality of national and international market players as an important instrument to improve the existing technology and to anticipate future needs.

Inside our R&D we have more than 100 engineers and qualified technicians, always at work on new projects. They provide our customers with technical support; develop software; modify, adapt and improve products and find technical solutions that meet new specific applications.

Great investments are allocated to this area to provide it with the most sophisticated and updated equipment in order to give our customers innovative and first class solutions, based on a strong updated know-how.

VALUES OF SERVICE TO THE MARKET

Over the years, TCI has been able to anticipate and accomplish every market changes.

TCI has established itself as a leading company in the lighting field:

- By promoting the development and the implementation of new technologies through the participation in working groups such as DALI, ZHAGA, COMEX etc.
- By developing and implementing technical solutions related to health and safety: like the reduction of the ripple waves to minimize the consequences of light flickering, which are negative for our health.
- By making huge investments in the development and promotion of energy-saving wireless control systems.
- By participating in all the main international lighting exhibitions to meet customers and competitors, to understand the field trends and evaluate their potential implications.



STANDARDS & APPROVALS OFFICE

Since 2006 the Standards & Approvals office of TCI runs tests under WMT IECEE (Witnessed Manufacturer's Testing) and SMT IECEE (Supervised Manufacturers' Testing) on our products to obtain certifications concerning safety, performance and EMC.

Since 2016 our laboratory can operate in CTF stage 3 of the CB Scheme and/or the CB-FCS for SAFE and LITE standards.

As it is based on ISO/IEC 17025, the implemented procedure is recognised by several European and extra-European approval bodies working under the CB procedure.

The equipment used to make measurements is provided with a valid calibration certificate and the relevant metrological confirmation.

In TCI we run all our tests in compliance with the following standards:

SAFETY and PERFORMANCE Standards: IEC/EN 61347, IEC/EN 61558, IEC/EN 62031, IEC/EN 62717, IEC/EN 62384, IEC/EN 61047, IEC/EN 60929, IEC/EN 62811, IEC/EN 62442, IEC/EN 62386, IEC/EN 63128, IEC/EN 60598, IEC/EN 60570, IEC/EN 62368-1, IEC/EN 62493, IEC/EN 60998-1, IEC TR 61547-1, IEC TR 63158, UL 8750, UL 1310, CSA C22.2 No. 250.13, UL 1012, CSA C22.2 No. 107.1, UL 5085-1, CSA C22.2 No. 66.1, UL 5085-2, CSA C22.2 No. 66.2, UL 506, CSA-C22.2 No. 66, UL 62368-1

EMC Standards: CISPR 15, EN 55015, IEC/EN 61547, IEC/EN 61000-3-2, IEC/EN 61000-3-3, IEC/EN 61000-4-2, IEC/EN 61000-4-3, IEC/EN 61000-4-4, IEC/EN 61000-4-5, IEC/EN 61000-4-6, IEC/EN 61000-4-11



Our Approvals Office fills in the approval reports in compliance with the IECEE CB and EEPCA ENEC schemes and sends them along with the required samples to the approval bodies, DEKRA or UL.

All of this enables the reduction of the time to obtain certifications while insourcing as many aspects as possible of the company business.

The Approvals Office checks the conformity of TCI products according to the provisions of the following directives for the UE/CE marking:

- 2014/35/EU LV Low Voltage Directive
- 2014/30/EU EMC Electromagnetic Compatibility Directive
- 2009/125/EC Energy Efficiency of ECODESIGN products
- 2011/65/EU, 2015/863/EU RoHS Directive
- 2014/53/EU RED Radio devices Directive

The technicians of our Approvals Office actively participate in meetings of IEC/EN groups for the development and the update of IEC, DALI and ZHAGA standards.

TCI gives its own contribution to the progress in the lighting field by using innovation and standardisation as instruments to overcome the existing commercial barriers and to guarantee quality, safety and the safeguard of everybody health.

PATENT OFFICE

TCI constantly improves its IP strategy by ensuring the Intellectual Property rights of its core competences in order to increase our competitiveness and to fulfil our *vision*, while minimizing the IP-related risks.

Our first patent dates back to 1993: an electronic dimmer for halogen lamps controlled by a microprocessor. It became almost immediately one of the most requested articles on the market.

Our portfolio of patents and applications is so relevant that in 2012 a dedicated office inside TCI was established, which is responsible for the IP management.

Our Patent Office is at full disposal of all our partners to provide advice regarding the management of any potential disputes concerning IP in the lighting field and we are always available to co-develop patentable technical solutions and products.



QUALITY MANAGEMENT SYSTEM

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TCI is a quality-oriented company. Quality is an important instrument to realise our *vision* along with the improvement of the company reliability and the trust of our stakeholders. In order to continuously enhance our business performance, we implemented an excellent QMS.

Since 1995 TCI is ISO 9001 certified, thanks to the high quality of all our internal processes: from the purchase of raw materials and their storage to the recruitment and training of TCI staff, product's development and production and so on.

FAILURE RATE < 0,01% OVER A 10 YEAR PERIOD

The quality of TCI products is guaranteed by certifications but also by the positive feedback from the market as well as the value recognised by our competitors.

TCI is successful because each department is conceived and organised to be efficient and our team is made up of people doing their job with commitment, precision and reliability, jointly creating added value.

A few examples of our QMS implementation:

- **People:** TCI believes in the importance of recruitment and HR management policies to build an excellent team. At TCI there are a gym and a relax area for our collaborators to favour their psychophysical wellness. In order to improve and reinforce their job skills, TCI promotes an ongoing training policy.

- **Customers:** for us customers come first. In this connection we periodically send a questionnaire to all our customers to analyse their level of satisfaction and improve our customer service. The aspects to be evaluated include daily commercial feedbacks, the level of satisfaction, the strength of marketing tools, the pre and post-sales technical support etc.
- **Products:** in order to constantly improve the quality of our products we have implemented an RMA system to get easily and quickly market feedbacks and use them to optimise the performance of our solutions and/or to add useful info to our technical sheets thus ensuring their best use.



PRODUCTION DEPARTMENTS

TCI has 3 production departments: one for drivers, ballasts and trafos, one for standard LED modules and one for customised LED modules, AC drivers and drivers on board. We have a total of 56 lines. All the manufacturing processes take place in Saronno and each step is checked by qualified responsibles in order to guarantee the highest quality of products and maximum safety of our employees.

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The production is 100% tested, with a further burn-in test run on 1% of its output.

We make great investments (10% yearly) in new equipment to improve the production capacity.

WAREHOUSES

An optimal warehouse management needs to take into account several aspects.

First of all it requires a good management software that combines data to provide a clear picture of the current situation, supporting and improving overall the activities. A great care and precision are a must of our warehousemen.

TCI is deeply committed to the correct functioning of a complex system like the one we have. Due to the wide range of products, we have six warehouses. Large and bright spaces, careful and qualified staff, organised shelves and forklifts always in action reflect the well defined system which TCI considers the basis to provide our customers with an excellent service.



AFTER SALES & CUSTOMER CARE

We believe that customer care is a milestone for a solid and long-lasting relationship of collaboration and trust and it goes beyond the simple supply of products. Our customer service offers a 360° support for commercial and technical topics. Our website provides a search engine from which it is possible to get all the products information and certifications. Search filters guide users in finding the most suitable solution to their application.

In TCI we work everyday to ensure the full satisfaction of all our customers.

CRM

Creativity and Italian technology The way of Quality



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