



ICAPE GROUP
The power of precision

Precision. From design to delivery

Corporate presentation

Summary*

1.

Industry challenges

Value chain

Timeline and expansion

Key figures

2.

Our portfolio

Our expert services

Engineering

Sourcing

3.

Manufacturer

Logistics

Quality

Online PCB ordering

4.

CSR

Client testimonials

Key takeaways

Your sales contact

*This is a dynamic summary slide,
click on the part that interests you and go directly to the slide.



We understand your industry's challenges

Supply chain
constraints



Quality
issues



Increasing
prices



The necessity of diversifying the global supply chain

Supply chain constraints



Quality issues



Increasing prices



Tech companies are expanding their manufacturing footprint globally out of Asia

A 3.8% increase in US PCB production. 25% of companies are considering investing in manufacturing outside of Asia.

The hidden costs of compromising on quality



2016

Auto ignition issues

Estimated cost: **\$4bn+**



2017

Airbag errors

Estimated cost: **25bn+**



2018

Exploding phones

Estimated cost: **\$5bn+**



Supply chain constraints



Quality issues



Increasing prices

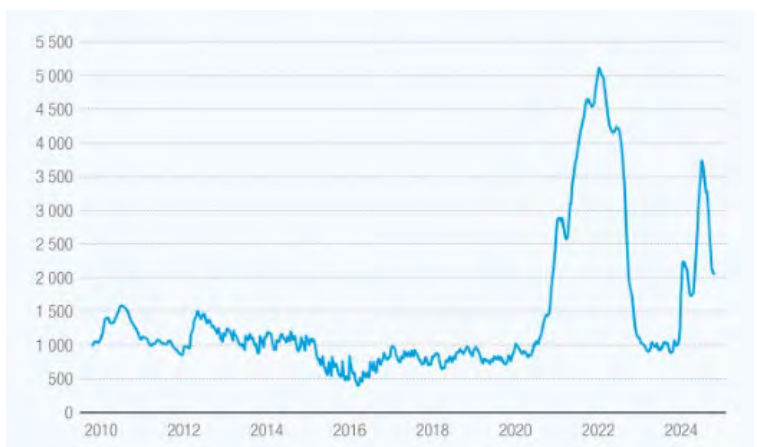
Global supply constraints and freight disruptions lead to increased lead times and costs



World Container Index

WCI & SCFI

Drewry WCI: Trade Route from Shanghai (US\$/40ft) Oct 2009-Oct 2024



DIFFERENCES BETWEEN RED SEA AND AFRICAN SHIPPING ROUTES



Source: ICIS & Xeneta



Global inflation
6.9%
Year 2023



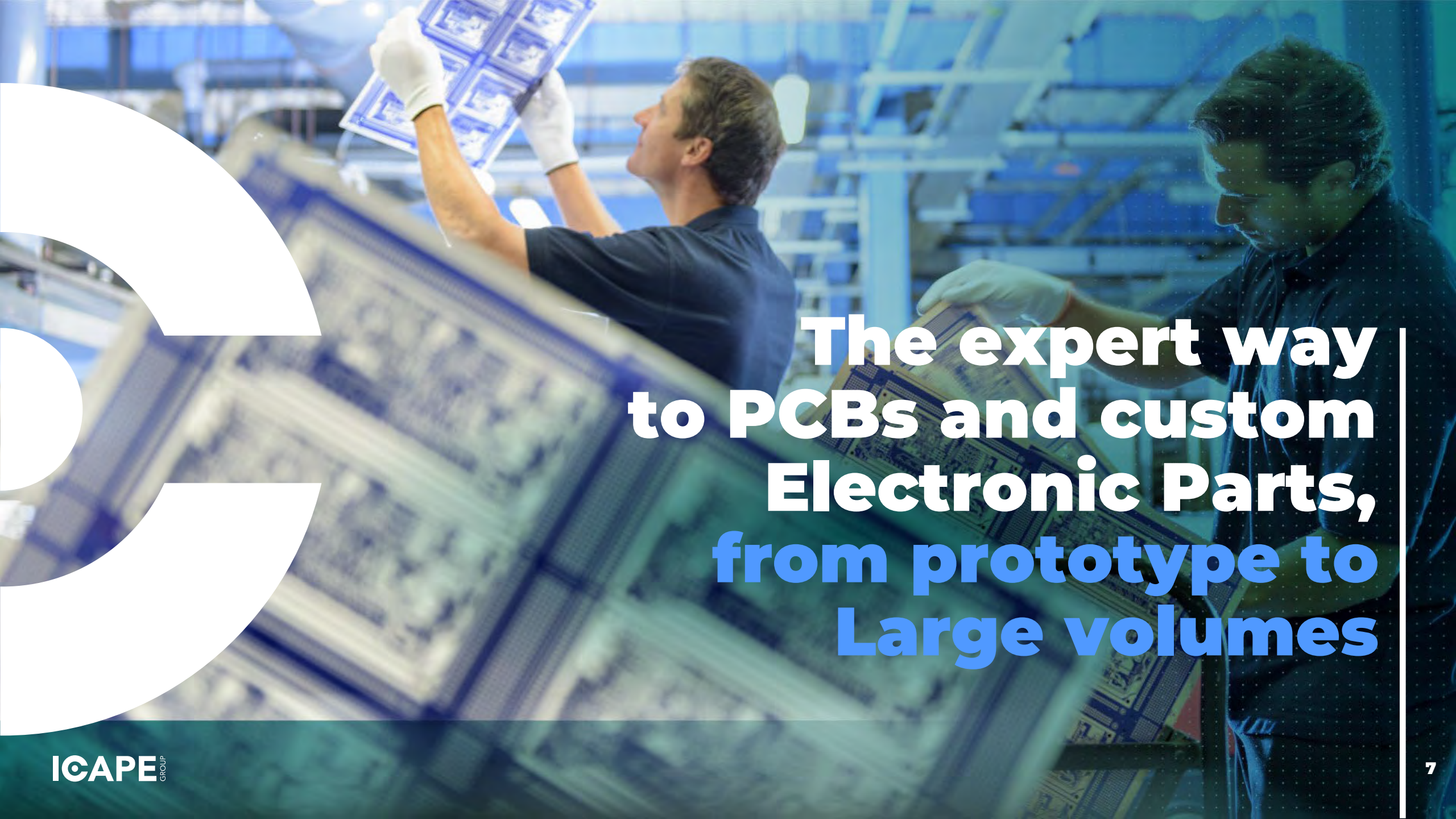
Ocean rates
+20%
Oct 2020 vs Oct 2024



Copper Foil
+15%
Oct 2020 vs Oct 2024

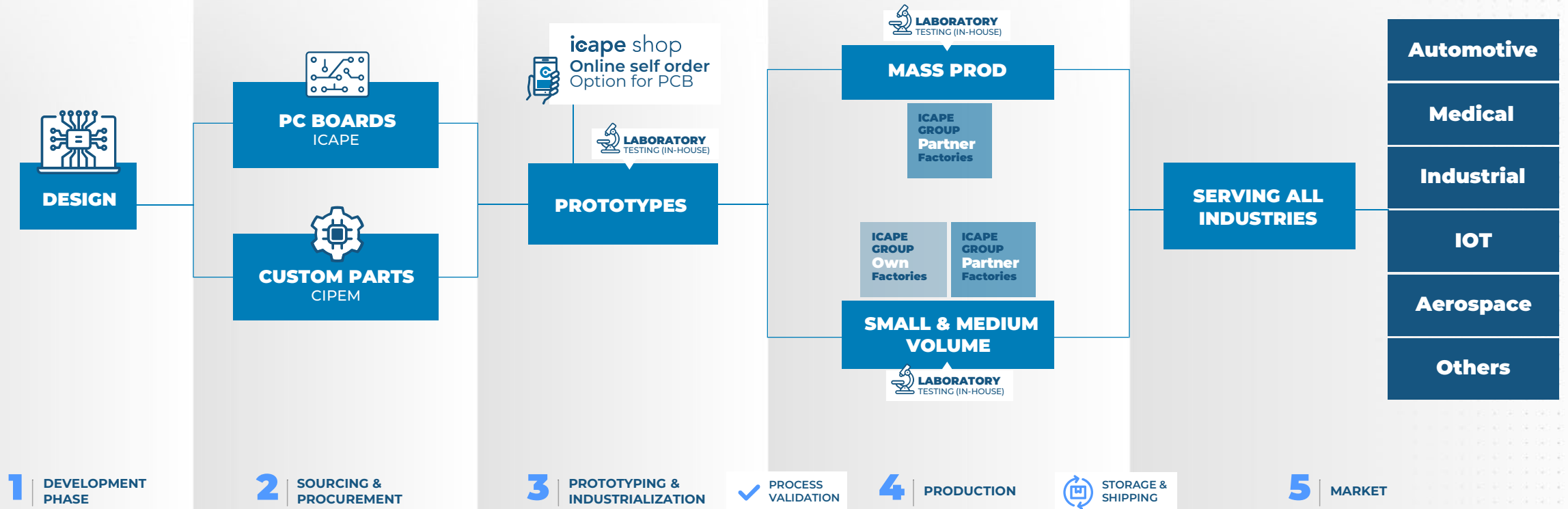


Crude oil WTI
+97%
Oct 2020 vs Oct 2024

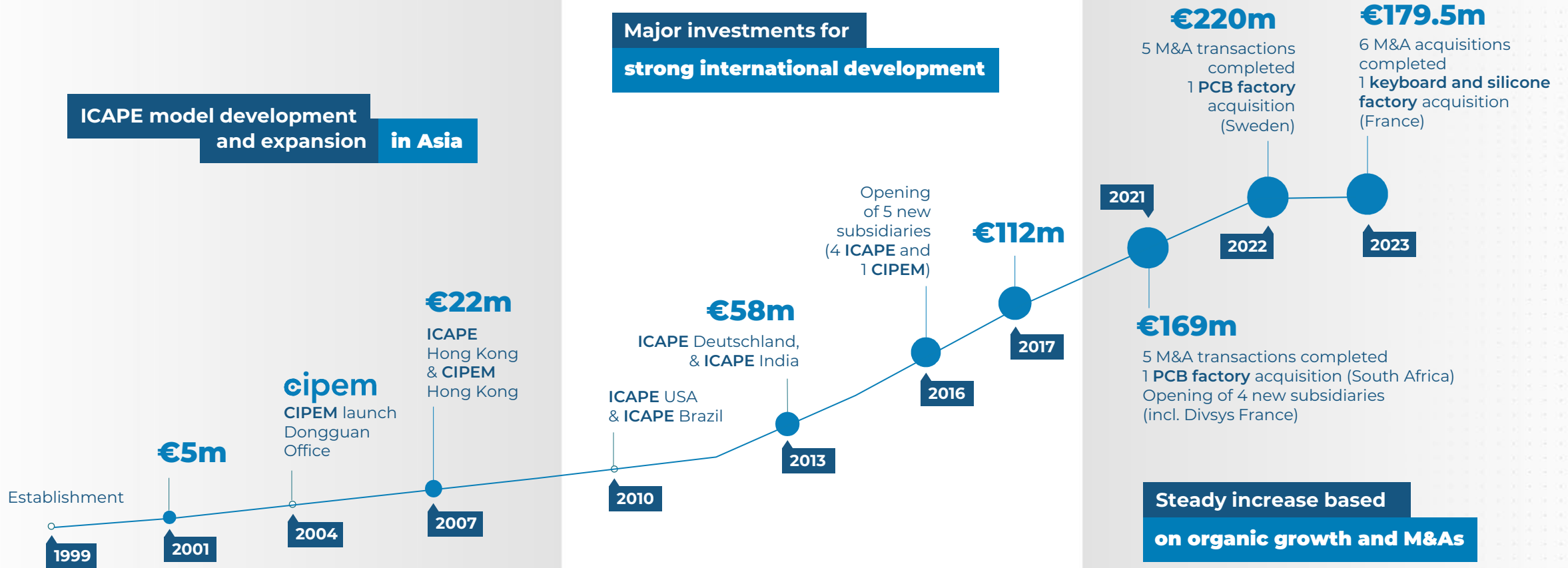


**The expert way
to PCBs and custom
Electronic Parts,
from prototype to
Large volumes**

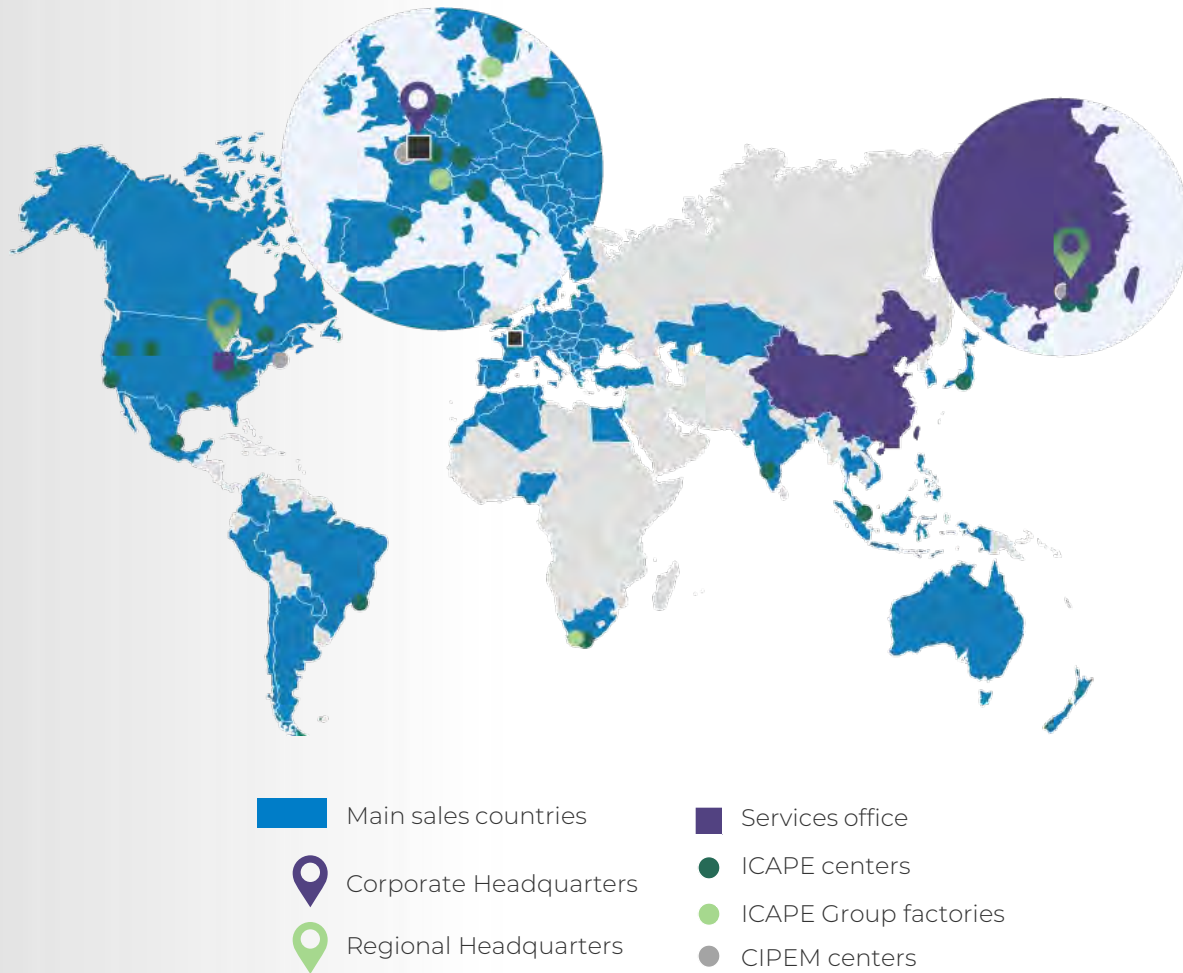
Our goal is to add value at every stage of the product creation chain



A history of growth and geographical expansion⁽¹⁾



ICAPE Group at a glance



Among the world's leading companies and one of the main players in Europe

650

employees including 260 multilingual employees in Asia

€179.5m

sales revenue⁽¹⁾

3,650

active customers

36

subsidiaries and 2 Service Offices in China

88

qualified suppliers

60

countries delivered

+27m

electronic parts delivered per month

3

ICAPE Group owned factories

73

ESG maturity ('Excellent' score)

The largest portfolio in the industry covering all your needs

icape

Printed Circuit Boards

+10 technologies 27 factories

HDI | Rigid-flex | Aluminum (IMS)
Semi-flex | Heavy Copper & Back Panel
Multilayer | Microwave /RF
Double-sided PTH
Single-sided & double-sided STH

cipem

Custom Electronic Parts

+10 commodities 61 factories

Cables & Connectors | Adapters
Transformers & Coils | Membrane
Switch Keypads | Batteries | Silicone
Displays | Metal | Plastic |
Sub assemblies / Turnkey Products

Complete electronics products

Turnkey products

Ideas to full-fledged Design

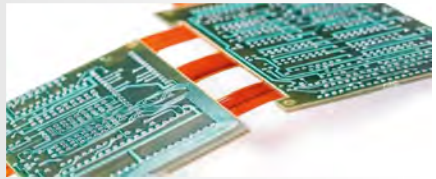
Prototypes to series production

R&D - Industrialization - production



High-density connection - HDI

- | HDI with 1, 2, or 3 levels or ELIC construction (with laser microvia)



Rigid-flex

- | Rigid part (4-16L), FR4
- | Flexible parts (1, 2, 4L)
- | EMI Shield Film on Flexible area



Aluminium (IMS)

- | Power & Lighting applications
- | Raw material on metallic base: aluminum, copper, steel



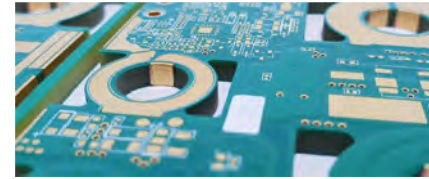
Semi-flex

- | Economic 3D PCB in FR4 (1 - 4L)
- | Lamination/routing process, cost advantage vs Rigid-Flex



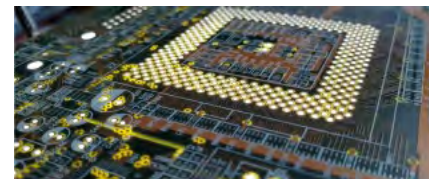
Flex

- | Standard products (1, 2, 4L) with coverlays or PHI.
- | FR4 Stiffeners
- | EMI Shield Film



Back panel/Heavy copper

- | Power Electronics
- | High layer count (up to 64 layers)



Multilayer

- | Standard products (4-6L), FR4, photo-sensitive Solder Mask
- | Special types (thick copper, thin core, hard gold, etc)
- | High layer count (8 to 64 layers)



Microwave/RF

- | Radio frequency and antenna applications



Double-sided PTH

- | High-density products
- | Special types



Single-sided & double-sided STH

- | With conductive jumpers: carbon, silver, or copper pastes
- | Silver Through Holes (STH) or Copper Paste Through Holes (CPTH)



Cables & connectors

- | Customized Cable Assemblies & Common Cables Assemblies
- | Wire Harnesses & Customized Connectors



Adapters

- | Wall Mount Adapters & Interchangeable or Fixed AC Adapters
- | Desktop Power Supply & Open Frame Adapter



Transformers & coils

- | High & Low Frequency Transformers
- | Air Coils & Filters & Toroids, Coils & Inductors



Membrane Switch Keypads

- | PET + Silver Ink Membrane Switch Keypads
- | FPC Membrane Switch Keypads
- | Overlays / Technical Labels / Pad Printing



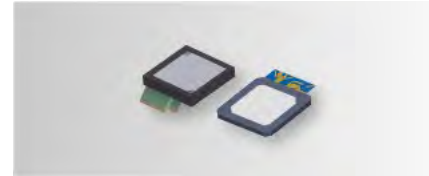
Batteries

- | Li-ion & Li-Po Rechargeable Batteries
- | Ni-Mh & Lead Acid Rechargeable Batteries
- | Primary Batteries (Coin Cell, Standard Alkaline, etc)



Silicone

- | Silicone Keypads / Silicone Sealing Gasket
- | Silicone Technical Parts



Displays

- | TFT Displays & VA Type
- | TN & HTN & STN & FSTN & DFSTN Types



Metal

- | Die Casting Parts
- | Stampings Parts & EMC Shielding
- | Aluminum Extrusion Heatsinks



Plastic

- | Plastic Injection Parts
- | Plastic Injection Molding



Sub-assemblies / Turnkey Products

- | Electromechanical Assemblies
- | PCB Assemblies
- | Remote Control Units

Combined with unique services

ENGINEERING

- Design to cost/DFM
- R&D
- Value-engineering
- Local FAE team

SOURCING

- Strict AVL
- Diversified factories
- All volumes
- Purchasing leverage

QUALITY

- Permanent audits
- Strict targets
- Double control
- 99.9% quality accuracy

SUPPLY CHAIN

- Consolidation
- VMI/CMI/Call Off
- All incoterms
- Local warehouses

QUICK TURN SERVICES

- Online shop
- Prototype & Small series
- Fast delivery

Save time & money with efficient engineering

Meet Your Local Experts

The initial design matters!

- The best design choices (our own design team)
- Value-engineering changes
- Fewer iterations: fast production status ready

- Technical data and specification analysis
- TQ (technical question) if needed
- Ucamco integr8tor
- Design rules comparison



Erik Pedersen

FAE Director
Scandinavia &
Poland & Asia

★ 35 years of experience



Ron Sandala

FAE Engineer
North America

★ 36 years of experience



Olivier Gauthier

FAE Engineer
France &
Southern Europe

★ 26 years of experience



Wolfgang Marten

FAE Engineer
German speaking countries

★ 21 years of experience



Derek LV

FAE Engineer
China

★ 17 years of experience



Richard Könsgen

FAE Engineer
Germany &
The Netherlands

★ 8 years of experience



Mario Cianfriglia

FAE Engineer
Italy

★ 36 years of experience



Wolmer Cittadini

FAE Engineer
Italy

★ 30 years of experience



Fabrice Peron

Turnkey Specialist
Electronic Parts
Technical Director

★ 35 years of experience

A diversified base around the world

Our purchasing leverage as a way to **fight price increases** and increase your **buying power**.


Extensive network of **global** partner factories, enabling us to deliver tailored solutions **locally** or **anywhere in the world** to meet your unique needs.

ICAPE Group's purchasing networks



We are more than a supplier,
We are a manufacturer

trax

 **SOUTH AFRICA**

Quick turn
Rigid PCB

MONTHLY CAPACITY
550 m2

MAIN PRODUCTION

SS - 18L FR4

PTFE

CERTIFICATES

ISO9001 UL

**icape-
mmcb**

 **SWEDEN** | Europe

Quick Turn
Rigid PCB

MONTHLY CAPACITY
500 m²

MAIN PRODUCTION

2L 4L 6L 8L

CERTIFICATES

ISO9001 UL

ihm

 **FRANCE** | Europe

**Keyboards &
Control Panels**

MAIN PRODUCTION

Membrane Switch
Keypads

Overlays Pad Printing

Technical Labels

Integration

CERTIFICATES

ISO9001 14001

A logistics network that spans the world

✓ 95% On-Time Delivery

- Systematic consolidation and optimization
- Multiple logistics platforms
- Tracking of goods in real time
- Inventory management (VMI/CMI/Call-off)
- Sustainability and eco-friendly shipping practices



Air Freight

10 to 14 days



Sea Freight

6 to 11 weeks



Sea-Air Freight (France/Germany)

3 to 4 weeks / 10-25% cheaper than air



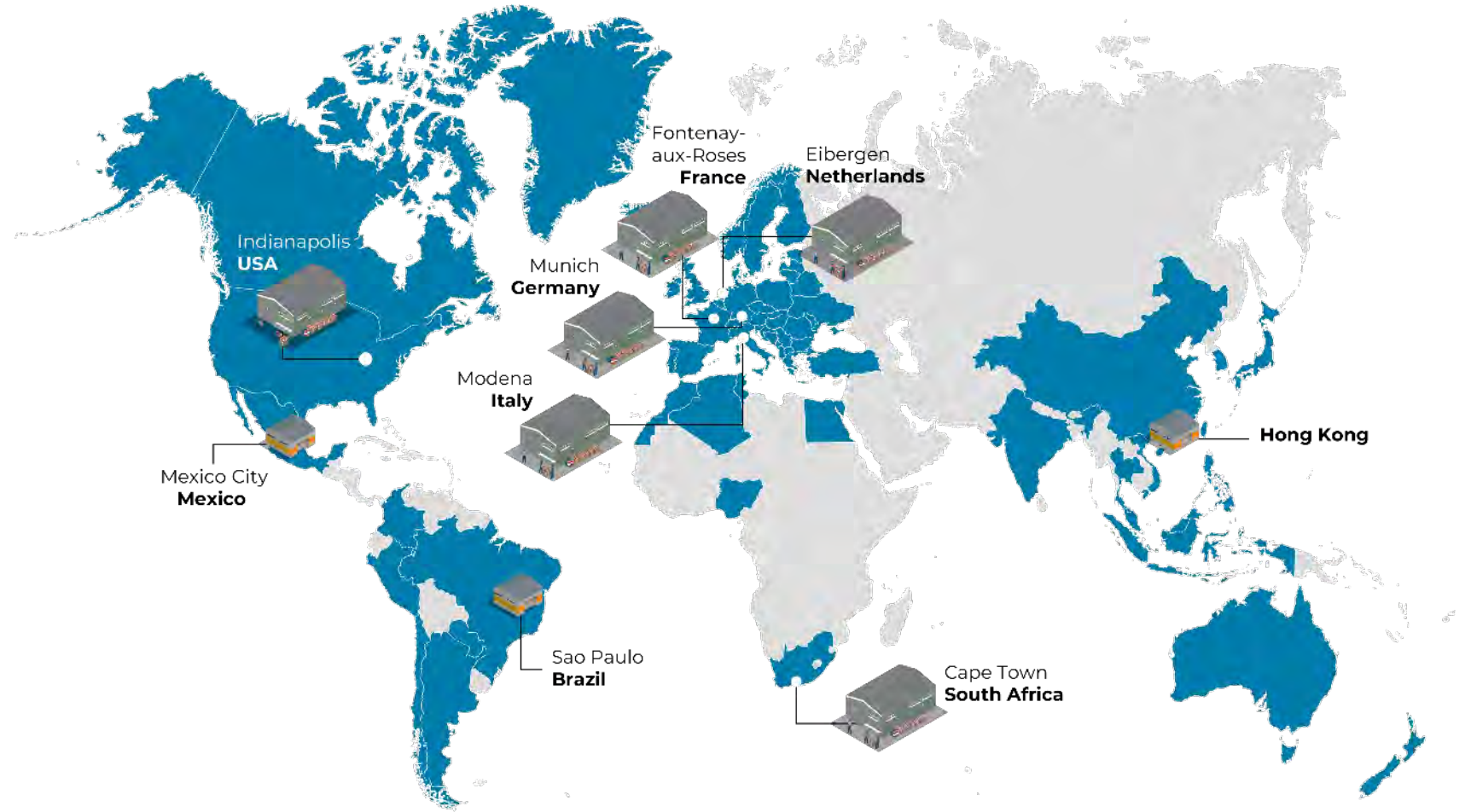
Ground Freight

3 to 5 days (Europe only)

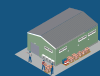


Express Freight

3 to 5 days



■ Sales presence



ICAPÉ Group warehouses



Sub-contracted warehouses

Uncompromising standards every step of the production process

IPC 600 | IPC 610
ISO 9001 | VDA AUDITOR



A team of **80 people** dedicated to quality



6 in-house labs in France, China, Sweden, Germany, South Africa, and the US



40 DPPM control target for **automotive/aero**



100 quality audits performed per year

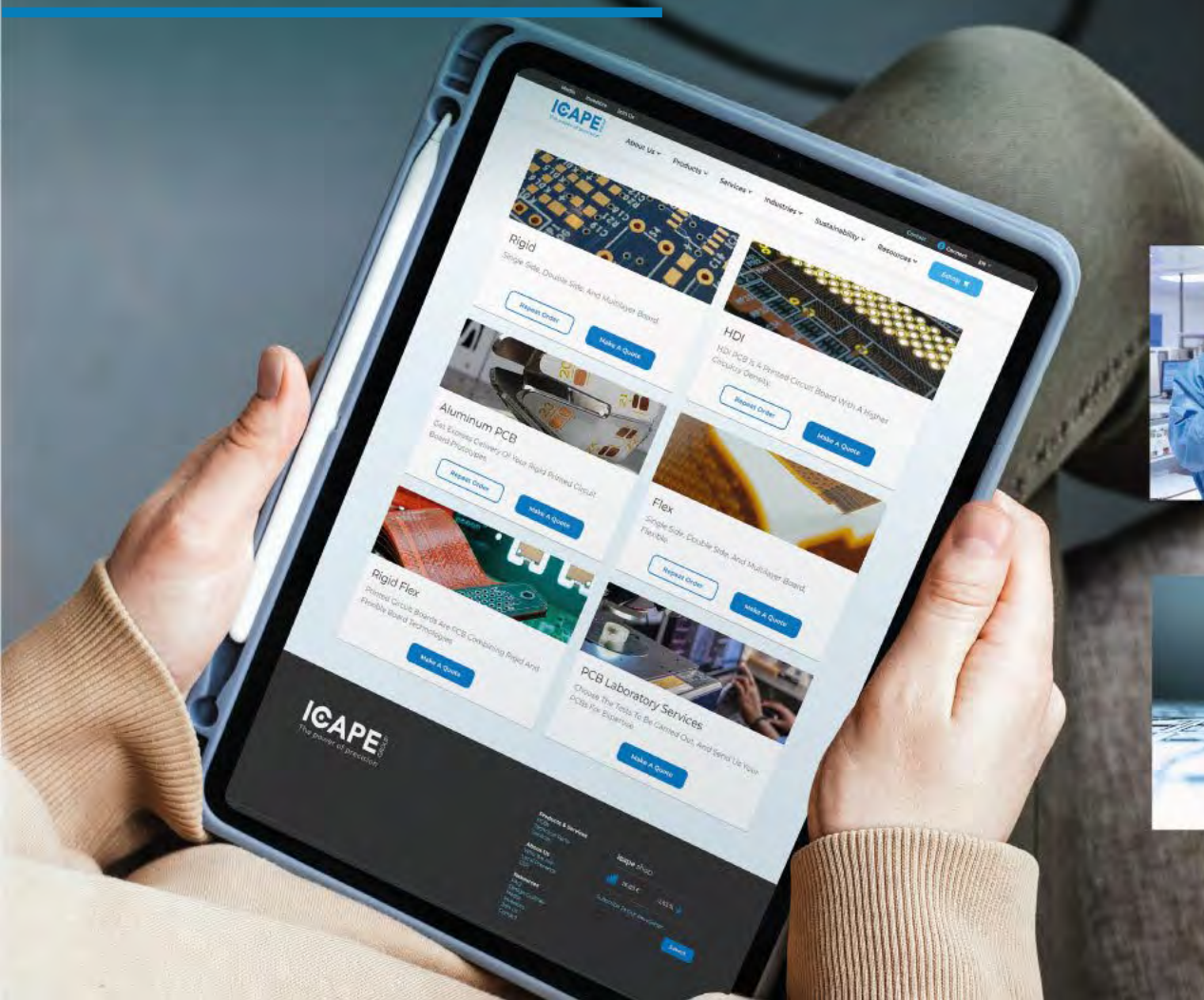


Full inspection Samples, quick turn & critical industries



Inspectors on site

The easiest way to order PCBs online



Prototyping and small series PCB lab testing services Stencils



2 DAY
DELIVERY
MIN



ENHANCED
QUALITY
CONTROL



COMPLETE
QUALITY
ACCURACY



AUTOMATIC
GERBER
EXTRACTION



QUALITY CONTROL

- Product Liability Analysis & Assurance
- Low defect rate
- Several controls on all batches (over 30 tests)



ENGINEERING TEAM

- Team of 6 PCB engineers available 16 hours/day and 6 days/week
- Accelerate product development cycle
- A complete set of services
(DFM, UCAMCO Report, Working Gerber, Stencil)

Beyond Products: Unleashing Expertise



Market Reports & Design rules

Providing strategic insights and trends to empower your decisions in the ever-evolving landscape



Download our
latest reports



Webinars & Seminars

To keep you informed about industry developments, best practices, and cutting-edge technologies



Check our next dates

All Around ELECTRONICS



Events

Join our events for insights on trends, innovations, designs, and evolving norms.
Stay informed with us!

Beyond Brokering: Trust and Expertise Over Products

	Traditional PCB Broker	ICAPE GROUP
All Technologies	<i>Only for large volume orders</i>	✓
FAE department support	<i>Limited to only PCBs and for large volume orders</i>	✓
Company-owned factories	✗	✓
Liability Insurance	<i>Limited</i>	✓
Custom Electronic Parts	✗	✓
Online PCB shop	✗	✓
In-house lab testing	✗	✓
Worldwide Sales Presence	✗	✓

CSR is embedded in everything we do



93% ISO 14001 certified
of our PCB partners factories



100% CSR audited
of our partners factories



56%
Of **female employees**



44
different **nationalities**



Scoring 73
For **ESG maturity**

- | Providing a **safe** and stimulating **environment** for our teams
- | Promoting a **responsible** and sustainable **value chain**
- | Operating with independence and **integrity**
- | Limiting our impact on the **environment** and climate change

Let our clients speak for us

57.5 | GREAT



« One of the recent great successes with CIPEM was a project to produce plastics molds in a very short time.

In short, a well-run project by both that achieved the desired objectives and encourages future projects with CIPEM..



LACROIX Electronics

chose ICAPE Group as their strategic electronic parts and PCB partner



« ACTIA Automotive started a supplier partnership with ICAPE in 2015. Their technical expertise in the PCB environment, responsiveness of interlocutors as well as competitiveness at the price level make them a strategic partner.



ACTIA Automotive

chose ICAPE Group as their strategic PCB partner



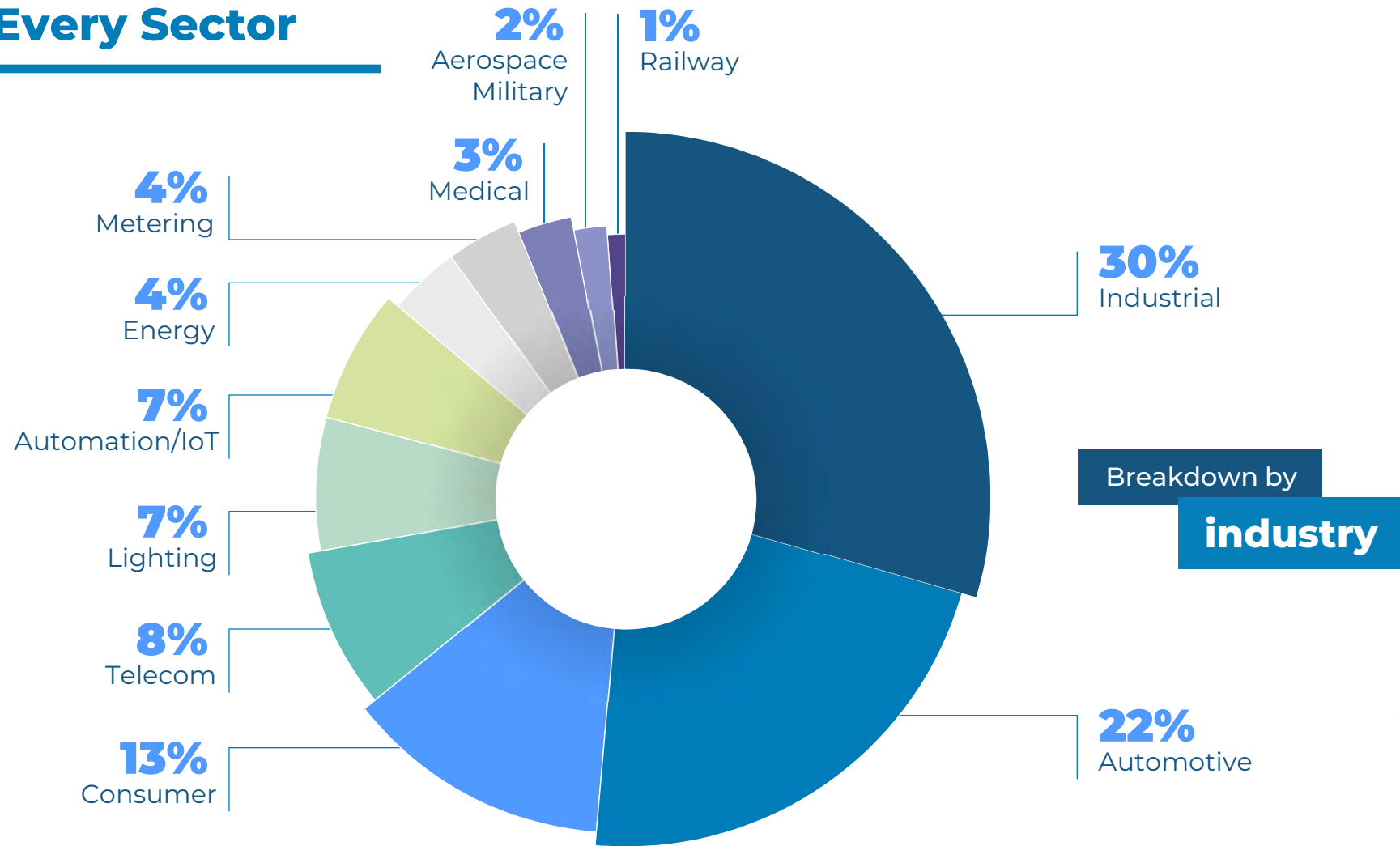
« We have found with ICAPE the ideal partner for short times productions and prices; being very competitive and with quick answers make TEMA's Custom Electronics always be a pride of Made in Italy production.



TEMA S.P.A.

chose ICAPE Group as their strategic partner

Revenue Diversity: Expertise Reach Across Every Sector



Credentials that Count: Our Certifications in Every Industry



Main certifications



Automotive



Aerospace



Liability Insurance



UP TO €15M
Highest on the market

Routing Parameters

afnor SPEC 2212

Medical



Industrial



Railway



Let us be the right partner for your projects



The most **diversified portfolio** in the industry



Unmatched **Technical Expertise**



A **global company** with a **local approach** to better serve you



Thank you

ICAPE^{GROUP}

The power of precision

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