

DOING BUSINESS WITH PAPER INDUSTRY IN EUROPE LEVERAGE ON SKYMINDER SOLUTIONS

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Paper Industry Overview

The pulp and paper industry comprises companies that use wood as raw material and produce pulp, paper, paperboard, and other cellulose-based products.

The pulp and paper manufacturing sector is energy and raw materials intensive, with high capital costs and long investment cycles. The industry has an excellent track record in resource efficiency and innovation. Thanks to its knowledge of wood fibre, the pulp and paper industry is at the forefront of developing innovative products alongside more traditional products. It is a pioneer in making the EU low-carbon bioeconomy an industrial reality.

Paper industry is important for the following reasons:

- Environment – thanks to improved process efficiency, the industry has become more energy self-sufficient and less CO₂-intensive by generating more than half of its primary energy from biomass.

- Recycling – voluntary industry-led initiatives in addition to legislative measures, have resulted in a paper recycling rate exceeding 70% in Europe. Raw materials used in the production and converting of paper and board come from sustainable sources.
- Innovation - the high level of expertise and continuous research and innovation allow these industries to exploit new business models, develop novel products and technologies, and progress toward a low-carbon bioeconomy.

Main challenges are:

- Lower consumption - graphic paper consumption in Europe continues to decrease due to digitalisation. This is counter-balanced by growth in packaging and hygiene papers however. The creation novel bio-based products creates vast opportunities for the sector.
- Trade barriers - the sector is increasing its share of exports outside the EU but tariff barriers and protectionist subsidies for rival goods create an uneven playing field. Taxes and export duties imposed by non-EU countries on wood exports raise concerns. For example, fibre raw material represents the highest share of production costs, and so its availability at affordable prices is crucial for the sector.
- Raw material supply - the demand for domestic EU wood supplies by end-users such as bioenergy firms is rising. Increasing the mobilisation of wood in a sustainable way and developing new, innovative ways to further optimise the added value from raw materials through the cascading use of wood, would help to match wood supply and demand.
- Recycling - the paper recycling rate in Europe is very close to its maximum. Improvements in separate collection systems and innovation in sorting and recycling technology can further increase the quality and availability of secondary raw materials. The supply may also be challenged by the increasing amount of recovered paper exports to non-EU countries.
- Energy prices - rising energy prices in Europe, combined with increasing gas prices compared to North America, place the sector at a global competitive disadvantage.
- The EU environmental, energy, and transport policies have a major influence on the future of the sector. A good regulatory framework is essential to supporting sustainable growth, investor certainty, and a level playing field.

Main opportunities are:

- Resource efficiency - continuous technological improvements can further reduce environmental impacts and optimise the use of resources such as raw materials, water, and energy. New processes can offer innovative ways to develop new products and applications based on cellulose fibre that generate more added value. Breakthrough technologies, such as those reducing heat use in paper production through reduced water consumption, are needed to achieve the sector's objectives for the 2050 Roadmap towards a low-carbon bio-economy. These objective include an 80% CO2 reduction and 50% value growth by 2050.
- Bioeconomy - the EU pulp and paper sector is taking advantage of the opportunities offered by the bioeconomy. New business concepts will allow it to use the entire potential of wood and wood fibre to produce products and novel materials for the textile, cosmetics, food, and pharmaceutical industries; bio-based fuels and chemicals; and traditional wood-based products.

SOURCE: European Commission

The European association representing the paper industry (Cepi) is a non-profit-making organisation. Cepi is headed by Director General Jori Ringman with a staff of 21 employees, based in Brussels. It has four standing committees, which take long-term strategic perspectives on the issues affecting the industry. These are the Environment and Safety, Climate Change and Energy, Forest and Recycling committees under which a number of ad-hoc issue groups operate. The Association Directors' Group (ADG) is the senior advisory group to the Director General of Cepi and is composed of Director Generals of National Associations.

Cepi is managed by a 33-person Board, and is composed of representatives of National Associations and Chief Executive Officers (CEOs). It approves Cepi's policies, strategies and objectives as well as its business plan and budget as proposed by the Steering Committee. The Steering Committee is composed of two members from the ADG and four Board members, and is a formal link between committees and the Board, driving policy areas. Cepi's Director General ensures compliance of Cepi actions with Board decisions and consistency of policy between the committees.

Mission and Vision

To secure pulp and paper industries competitiveness towards EU policy makers
To represent the paper industry with EU institutions and Brussels based stakeholders
To improve the image and visibility of the paper industry and other related industries
To be the example of how competitiveness and sustainability can go hand in hand

Countries

Austria, Belgium, Czech Republic, France, Finland, Germany, Hungary, Italy, The Netherlands, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Romania, United Kingdom

Source:CEPI

Facts and Figures

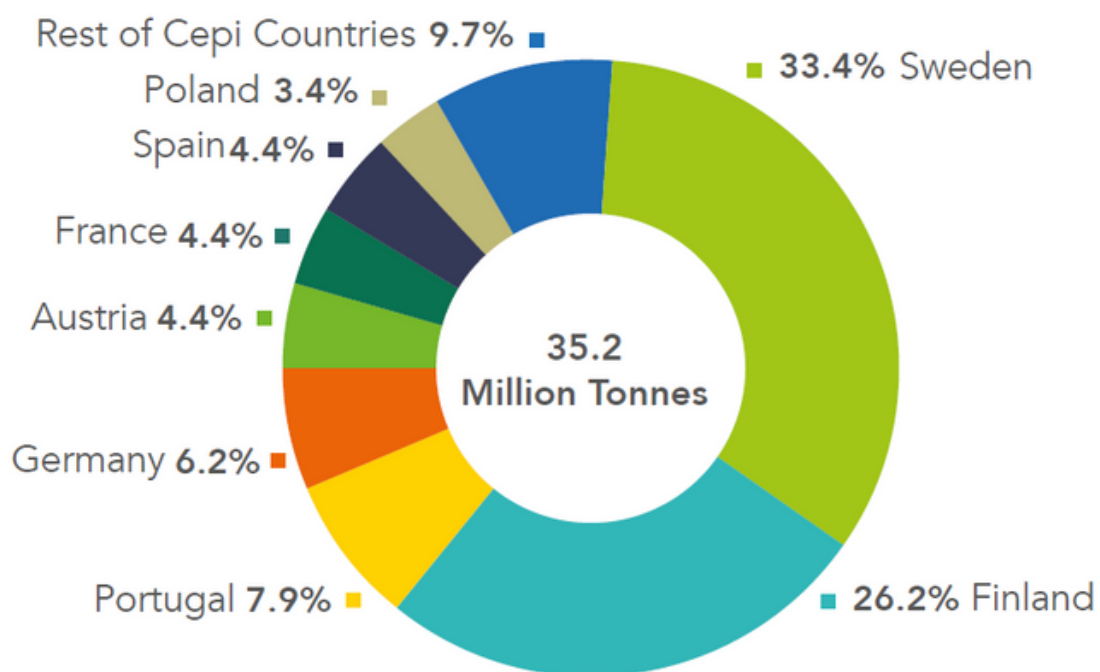
The pulp and paper industry provides 180 000 jobs in Europe directly. It has a turnover of 115 billion euros and adds 25 billion euros to the EU GDP. It is strong in export markets, with an export rate of 21% of its paper and board production.

Source:CEPI

Facts and Figures

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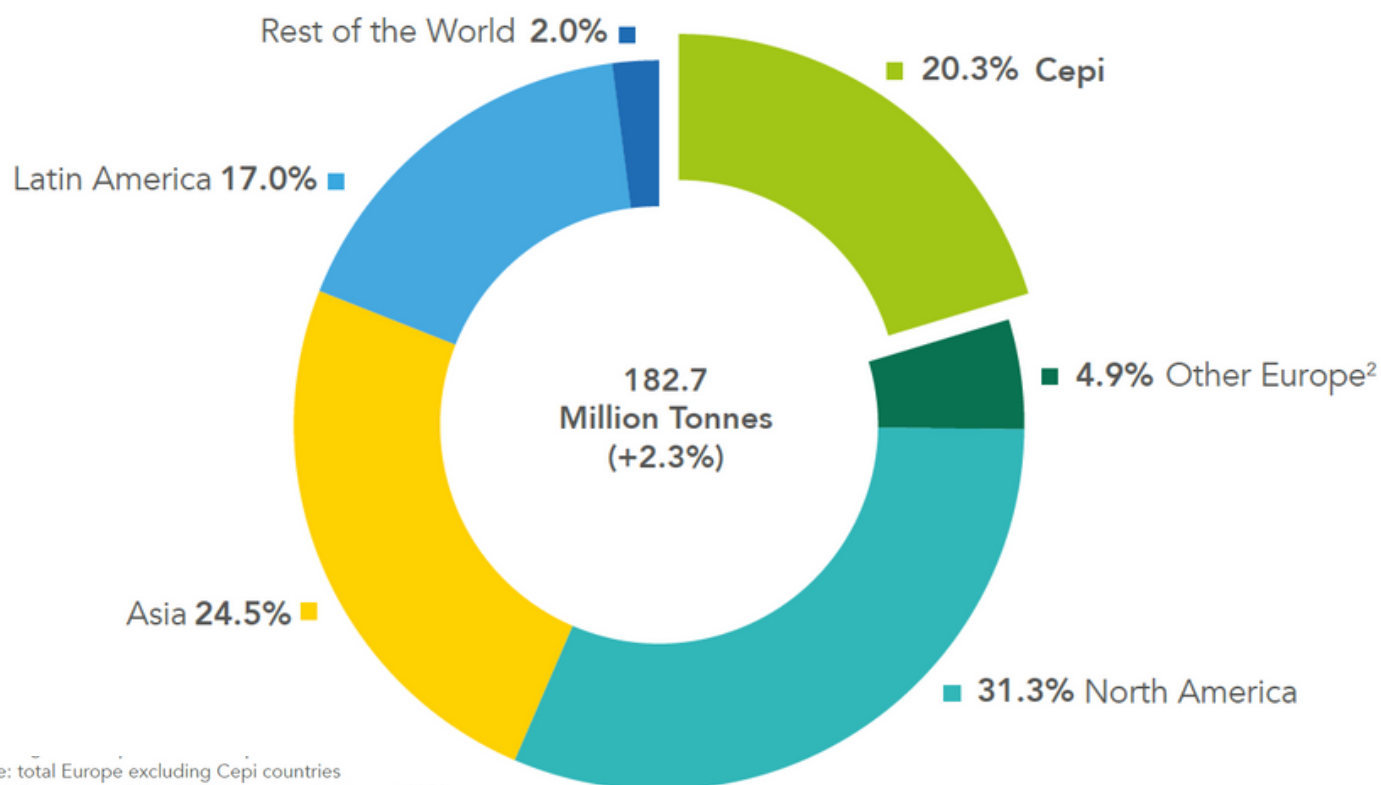
Total Pulp¹ Production by Country in 2022



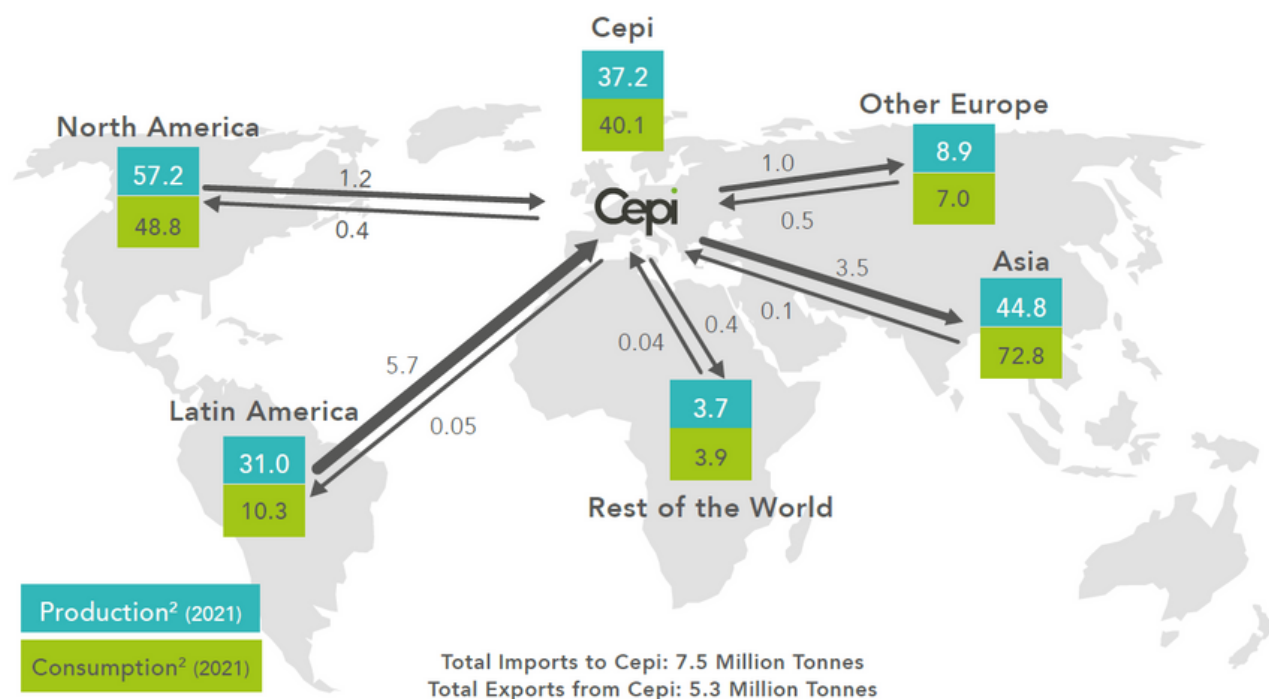
¹ Total Pulp = Market Pulp + Integrated Pulp

² Other Pulp: see definition page 30

World Total Pulp¹ Production by Region in 2021³

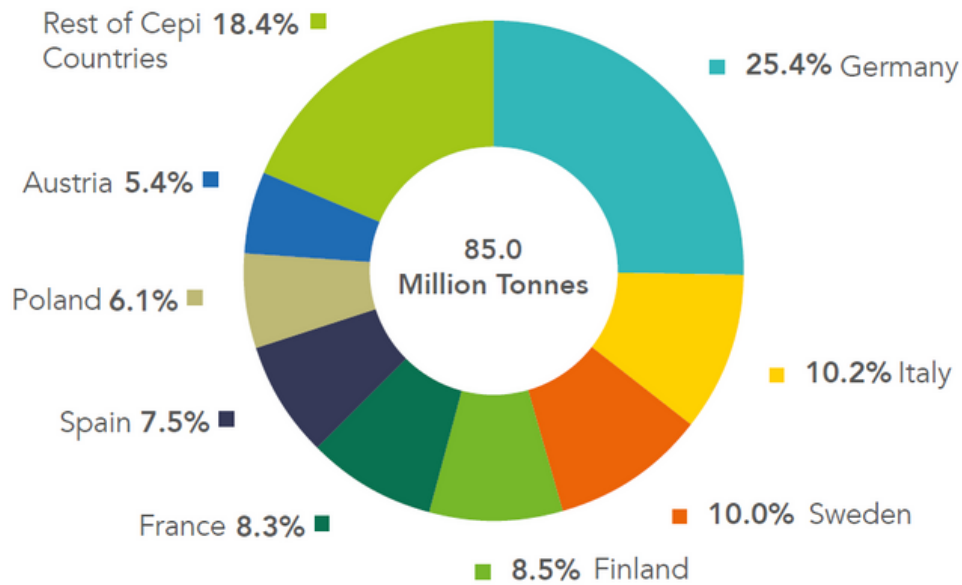


Trade Flows of Market Pulp in 2022 (Million Tonnes)



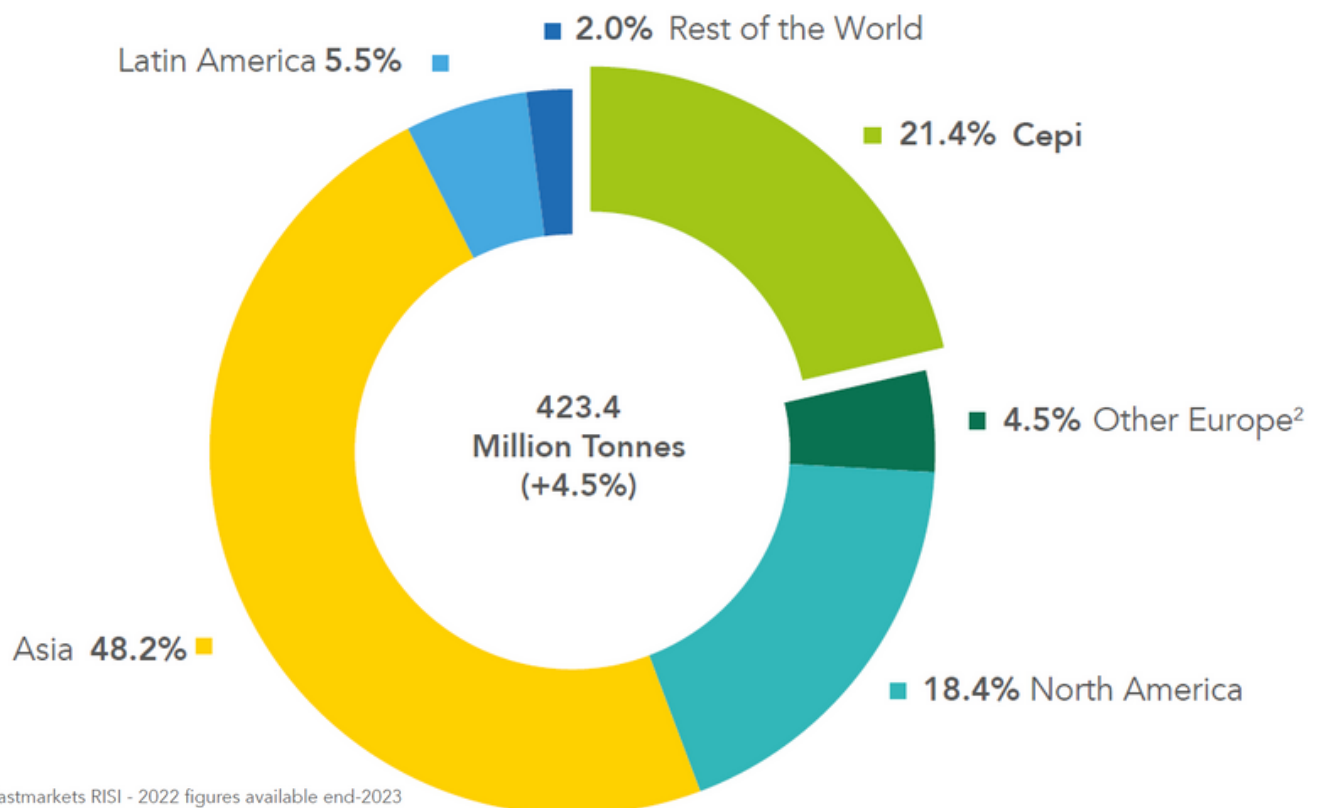
¹Other Europe: total Europe excluding Cepi countries
²Production and consumption of total pulp (market and integrated)
 Sources: Cepi, Fastmarkets RISI - 2022 figures available end-2023

Paper and Board Production by Country in 2022



¹Speciality paper and board can be defined as paper or board that require properties (physical, optical, electrical, chemical and/or other special considerations) that are different from the norm for the market sector and application being served.
Based on AWA (Alexander Watson Associates) and Cepi estimates.

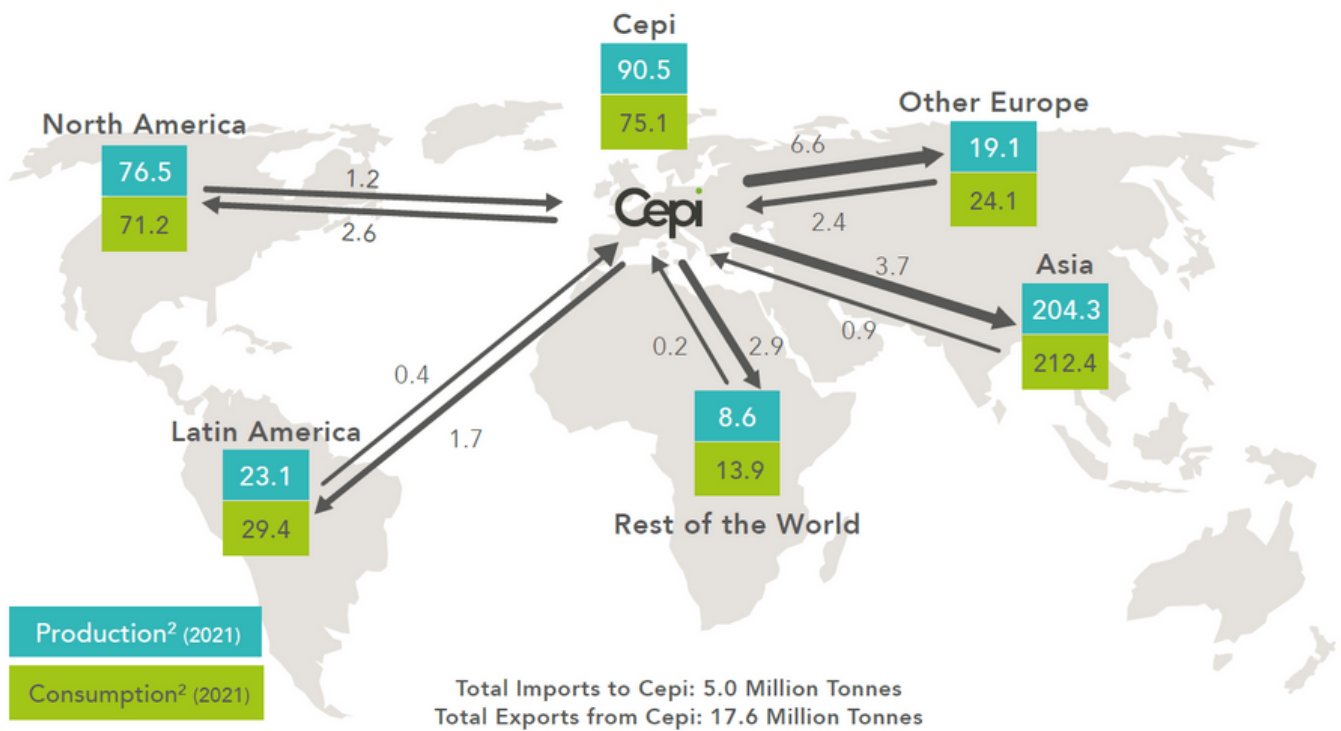
Paper and Board Production by Region in 2021¹



¹Sources: Cepi, Fastmarkets RISI - 2022 figures available end-2023

²Other Europe: total Europe excluding Cepi countries

Trade Flows of Paper and Board in 2022 (Million Tonnes)



¹ Other Europe: total Europe excluding Cepi countries

² Source: Cepi, Fastmarkets RISI - 2022 figures available end-2023

Focus on Paper Recycling

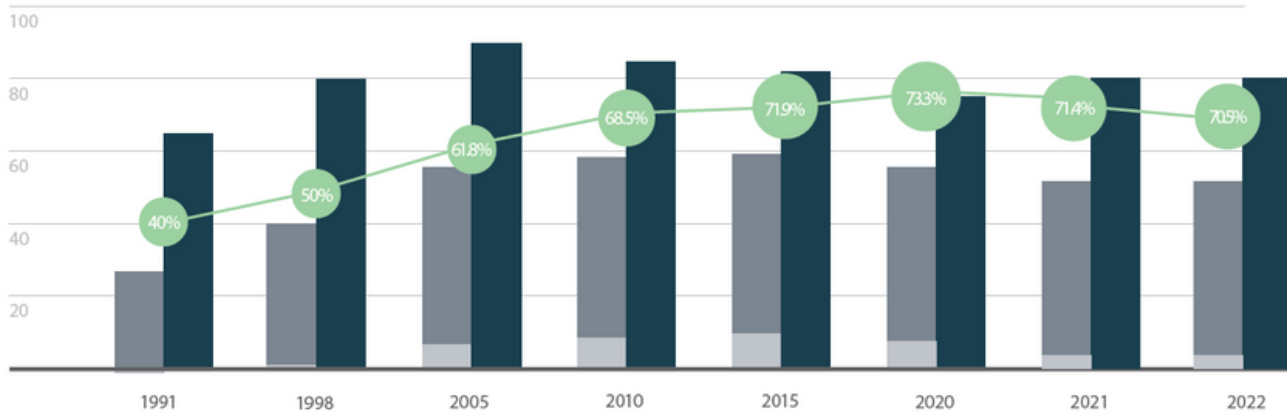
Since 2000, the European paper value chain has been committed to the two-fold aim of improving recycling and increasing efforts to remove obstacles hampering paper recycling in Europe. In 2021, the signatories of the European Declaration on Paper Recycling declared their commitment to reach a 76% paper recycling rate by 2030. The new European Declaration on Paper Recycling 2021-2030 was published on 29 June 2022.

EUROPEAN RECYCLING 1991-2022

Source: Cepi 2022

■ Recycling outside Europe
■ Recycling inside Europe
■ Paper and Board consumption in Europe
● Recycling Rate

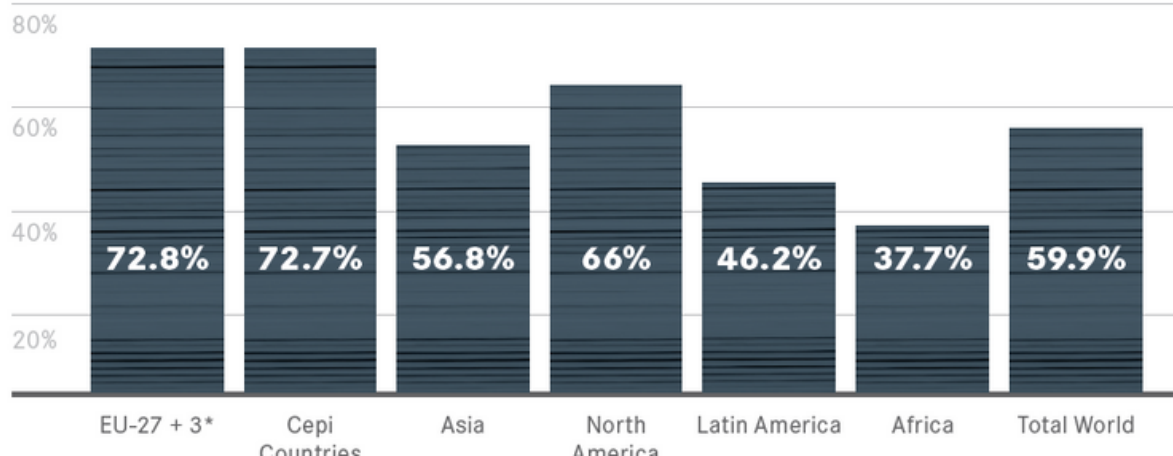
MILLION TONNES



RECYCLING RATE IN WORLD REGIONS IN 2021

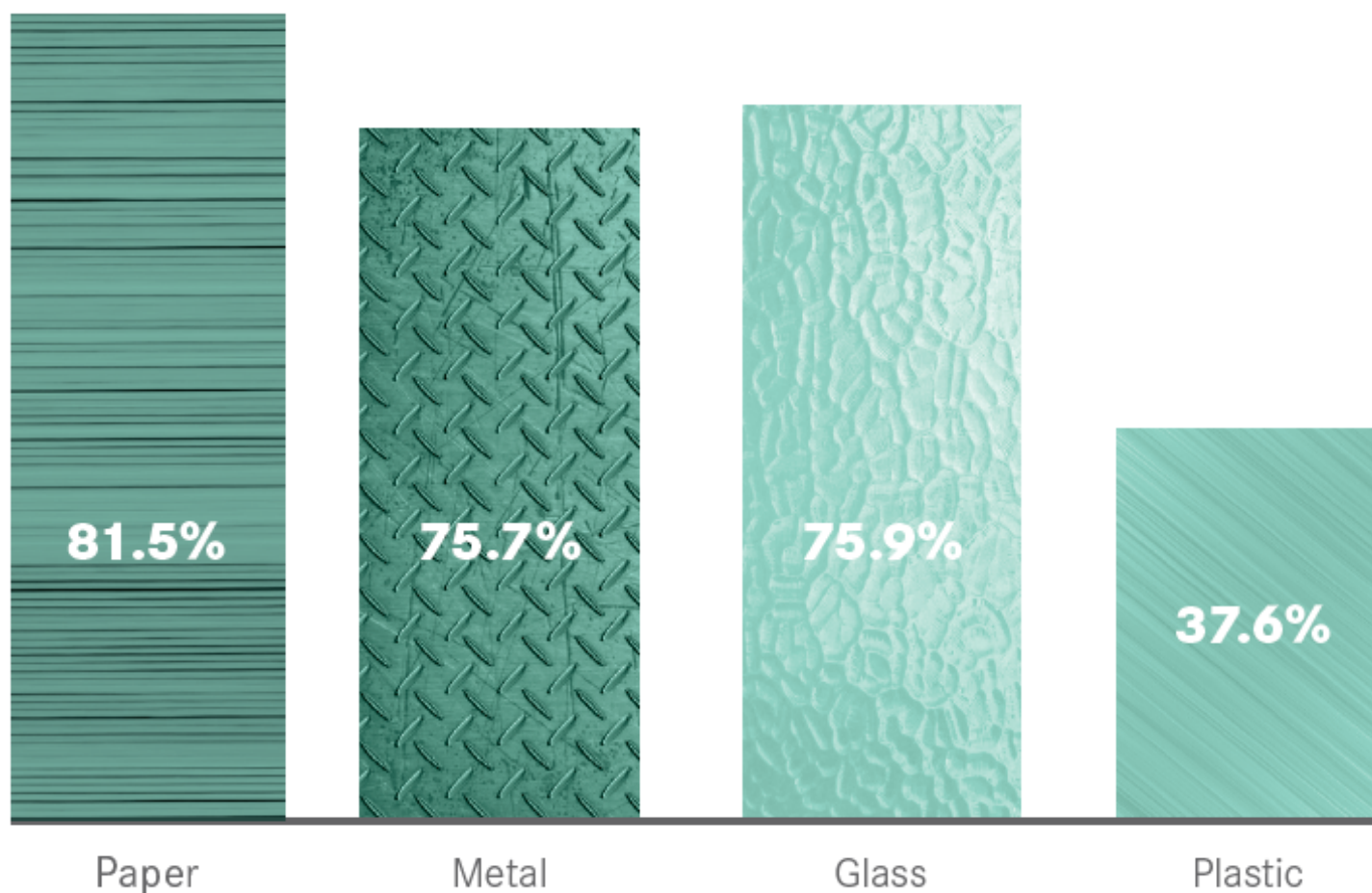
Cepi, Fastmarkets RISI – 2021

*EU-27 + 3: EU-27 + Norway, Switzerland and the United Kingdom



2020 PACKAGING RECYCLING RATES

Source: EUROSTAT



SKYMINDER AT A GLANCE FOR PAPER INDUSTRY

Solutions available for more than **240**
countries and jurisdictions

Best in class information thanks to more
than **40** providers, both local and global

12 available products and solutions

Web and **API** integration



SKYMINDER SOLUTIONS

SkyMinder is the worldwide CRIF platform helping you to take decisions based on high-quality information. If you are required to evaluate a business partner in the Paper Industry, a customer or a supplier, in a risk evaluation process or for compliance requirements or a cyber risk assessment, SkyMinder is the right solution.

Requirement	SkyMinder Solution	Description
Know business partners and risk level <ul style="list-style-type: none"> - have on board new suppliers - understand in depth customers creditworthiness 	Full Report and Slim Report	Information, with different level of details, related to all companies in the world, including firmographics, credit limit, risk indicator, management, shareholders, negative events etc.
Receive immediate notification with related details if a change affects a company	Full Monitoring	Detailed information about changes affecting a company as soon as happened. Combined possibility to request for free updated report.
Be alerted if there is change in company's information	Alert	Information related to the area involved by a change as soon as an event happened.
Periodically checks if there are changes involving companies	Planned Revision	Scheduled revision with updated report including company's changes if applicable
Obtain documents from Official Registry and LEI repository	Official Registry and LEI	Product range including documents coming from public sources or from LEI Registry
Company ownership overview	Verification Report	List of shareholders to understand company's structure
Compliance requirements and fraud checks	Compliance Report and Extended Check Report	Anti Bribery and Money Laundering lists checks related to financial crimes.
Risk of Cyber attack	Cyber Risk Report	Assess the level of risk related to a business partner in being involved in a cyber attack
Understand overall value of intangible assets of a company	Patent Due Diligence Report	Patent Asset Overview with geographical coverage, remaining life of active patent assets, high-value patent assets, technology and patent deployment, technology timeline, peer comparison, key inventors.