

RES 2026 in Astana: Kazakhstan at the heart of Central Asia's green transition

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From April 22 to 24, 2026, Astana hosted the Regional Ecological Summit – RES 2026, one of the main regional events dedicated to sustainability, energy transition, and the development of green technologies in Central Asia. The event brought together institutional representatives, international organizations, businesses, investors, research centers, and industry operators, confirming Kazakhstan's growing role as a platform for dialogue between Europe, Central Asia, the Caucasus, and major international partners. Participation in the Summit provided a close-up look at a transformative phase.

near major industrial hubs. In recent years, the Kazakh government has set increasingly ambitious goals to support the transformation of its energy system. The national strategy calls for increasing the share of electricity produced from renewable sources to 15% by 2030, while the long-term framework outlined in the "Concept on Transition towards Green Economy" sets the goal of achieving a 50% share of alternative and renewable sources in the electricity sector by 2050. These goals are complemented by the Strategy for Achieving Carbon Neutrality by 2060, adopted as a benchmark for the progressive decarbonization of the Kazakh economy. These objectives require not only the construction of new production facilities, but also significant investments in electricity grids, storage systems, the digitalization of energy infrastructure, and the efficiency of industrial processes. Available data for 2025 confirms the progressive growth of the renewable energy sector in Kazakhstan. According to the Kazakh Ministry of Energy, by the end of 2025, the share of electricity produced from renewable sources reached approximately 7% of national generation, up from 6.43% in 2024. In the same year, nine new plants with a total capacity of 503 MW were commissioned, including wind farms, solar plants, and a hydroelectric plant. Overall, the country now has 162 renewable energy plants, with an installed capacity of approximately 3.5 GW. These figures are still low compared to the share of traditional sources in the Kazakh energy system, but they are indicative of a growth trajectory that is now structured and supported by medium- to long-term government objectives. To support this path, the government has introduced industrial and regulatory policy tools aimed at attracting investment and making the market more predictable. These include competitive auction mechanisms for the allocation of new renewable capacity, long-term power purchase agreements, a strengthened regulatory framework for foreign investors, and a growing focus on integrated projects that combine generation, storage, and intelligent grid management. RES 2026 highlighted how Kazakhstan's energy transition cannot be considered solely in terms of green energy production. The real issue is building a broader industrial ecosystem capable of connecting energy, the environment, infrastructure, manufacturing, and innovation. The Summit addressed topics such as green finance, ESG criteria, sustainable water management, smart cities, the circular economy, biodiversity protection, and climate change adaptation. This integrated approach reflects Kazakhstan's desire to place sustainability at the heart of its economic development policies. Particular attention was also paid to infrastructure modernization. In a country characterized by vast distances, geographical constraints, significant climatic



A particularly significant event for the country. Kazakhstan, historically tied to an energy system based on fossil fuels, particularly coal, is now seeking to redefine its development model, orienting it toward greater environmental sustainability, progressive energy diversification, and greater openness to international technological cooperation. In this context, RES 2026 was not simply an exhibition event, but a moment of strategic discussion on the country's industrial, environmental, and energy priorities. The topic of the green transition takes on particular relevance in Kazakhstan.

The country has significant potential in the field of renewable energy, thanks to its vast surface area, high solar exposure in many areas, and favorable conditions for the development of wind energy, especially in the steppe regions and wind corridors.

Added to this is the need to modernise an energy system that is still heavily dependent on traditional plants, often concentrated

differences, and an uneven distribution of industrial centers, the ability to transport, balance, and manage energy is essential for the success of the transition. The development of renewable sources requires more flexible grids, storage systems, monitoring technologies, digital solutions, and advanced engineering skills. Without these elements, the increase in renewable capacity risks failing to fully translate into energy security and industrial competitiveness. The opportunities for Italian companies are significant in this context. Italy has recognized expertise in the fields of engineering, industrial components, automation, energy efficiency, water treatment, environmental management, and technologies for sustainable industry. These are areas fully consistent with the priorities emerged during the Summit and with the modernization needs of the Kazakh production system.

and ability to offer customized solutions. Another important factor concerns the regional dimension of the ongoing process. Kazakhstan is not only an attractive market in itself, but is increasingly emerging as a strategic platform for Central Asia as a whole. Its geographic location, the progressive development of its logistics infrastructure, and its growing role in Eurasian corridors strengthen the country's role as a privileged access point to neighboring markets sharing similar needs: energy diversification, industrial modernization, environmental protection, infrastructure safety, and the development of new technological capabilities. For Italian companies, a structured presence in Kazakhstan can therefore take on broader significance, not limited to the domestic market alone, but also oriented towards a regional perspective. In this sense, RES 2026 confirmed the importance of overseeing a transformation process from the earliest stages, destined to impact the area's industrial balance, building solid relationships, qualified partnerships, and a continuous presence in the region.



The market requires not only suppliers of systems or technologies, but also partners capable of contributing to the development of integrated solutions, skills transfer, and medium- to long-term industrial collaborations. Kazakhstan's interest is therefore focused on international cooperation models based on technological quality, partner reliability, and the ability to support projects through the various phases: preliminary analysis, design, regulatory compliance, implementation, training, and post-installation support.

This approach can represent favorable conditions for Italian companies, traditionally appreciated for their flexibility, technical specialization,