



EDISON NEXT PARTNERS WITH IRIS CERAMICA GROUP ON H2 FACTORY™ THE FIRST GREEN HYDROGEN-POWERED CERAMIC SLAB FACTORY

Milan/Fiorano Modenese, August 7th, 2023– Iris Ceramica Group, Italian world leader in the production of innovative solutions and high-end, large technical ceramic slabs, and holding company of U.S. based manufacturing facility Stonepeak Ceramics, partners with Edison Next, a company of Edison Group which leads clients and territories in their decarbonization and ecological transition journey, to develop H2 Factory™. H2 Factory™ is a new, ground-breaking production plant based in Castellarano (province of Reggio Emilia, Northern Italy) which will entirely use green hydrogen–powered by renewable energy and produced using a pioneering, bespoke system.

With this agreement, Iris Ceramica Group and Edison Next are launching the first project for the decarbonization of the ceramic industry using green hydrogen. This initiative marks the start of a new journey towards the decarbonization of a particularly energy-intensive industrial sector¹, which is a crucial contribution for achieving the energy transition objectives of both Italy and the ceramic district. The ceramic district, concentrated between the provinces of Modena and Reggio Emilia, is a strategic area of this production sector. Skill, technology, innovation, and determination to believe in a virtuous path toward decarbonization are the key elements of the first "green" ceramic industry.

"The start of this virtuous energy transition path with Iris Ceramica Group is the first significant step towards the decarbonization of a key sector for the Country," **Giovanni Brianza**, Edison Next CEO, declared, "Iris Ceramica Group represents an excellence of Italian manufacturing around the world, and its history shows the ability to tackle and win this challenge."

"For energy-intensive sectors, decarbonization means having the courage to rethink processes, intervening in the heart of production systems through the introduction of innovative technologies to guarantee environmental sustainability, as well as the competitive performance of the sector in the international markets." **Brianza** continues, "This project, based on the production and use of green hydrogen in an industrial sector, is part of Edison's strategy, which is investing in this energy vector through several projects for the benefit of industrial clients."

The partnership between Iris Ceramica Group and Edison Next marks the start of the second phase of an ambitious project. The first step towards decarbonization was completed last year, with Iris Ceramica Group working on the feasibility and implementation of the H2 Factory™ and the hosting of the green hydrogen production system, using the **highest design standards**. The use of this energy vector in the production process requires **specific measures**, not only in terms of facilities – the kiln needs to be engineered to be powered by a blend of hydrogen and natural gas – but also in terms of **strategic construction works** which include **rainwater collection tanks**, a **photovoltaic system on the factory's roof**, and specific hydrogen production and storage areas. The company also installed all the hydrogen distribution systems throughout the plant.

The factory, which will be powered by hydrogen starting in 2025, will produce **large slabs in 4D Ceramics** – where the fourth dimension refers precisely to sustainability –, and large full-body **technical porcelain stoneware surfaces** in thicknesses 12 and 20 mm, which are particularly ideal for the luxury furnishing sector.

¹ So-called Hard to Abate





"We are looking at a new dawn for the porcelain stoneware industry and the sector as a whole. The underlying principle of our green hydrogen factory is what I define as a new industrial humanism, with a central focus on sustainability and all its factors: environmental, social, and economic. The challenge is to assure significant savings of CO2 in the next 2 years, paving the way for the ceramic sector and the whole district, demonstrating that even an energy-intensive industry can become a virtuous "net zero" energy transition model. We hope that other companies follow our example, to the advantage of the whole community, which will eventually lead to the training of new professional expertise," declared **Federica Minozzi**, CEO of Iris Ceramica Group.

"Despite the unique scenarios of the past few years that have particularly affected the supply chain, changed the paradigms, and demanded the review of our business plans, we have continued to work stubbornly, overcoming obstacles and choosing the best synergies. With the technical support and highly valuable services of Edison Next, we aim to achieve carbon neutrality in our production of ceramic slabs by 2030. There is a guiding thread that binds economy to ecology, as my father expressed so well in the 1960s with the equation: Economy=Ecology. We believe in and support a new industrial culture of know-how, that in this necessary ecological transition sees an opportunity for change, for a better present and a better tomorrow," Federica Minozzi concluded.

For Iris Ceramica Group's H2 Factory™ in Italy, Edison Next will build a 1 MW green hydrogen production system based on electrolysis, powered by renewable energy. This is part of Iris Ceramica Group's major investment of 50 million euro for the construction of the new hydrogen-driven factory for the production of large slabs.

The electrolyzer uses rainwater from collection tanks, which fosters virtuous water management following the circular economy's principles. The project also involves the installation of another 1.2 MW photovoltaic system, in addition to the existing 2 MW one.

The hydrogen will be used particularly to feed the kiln, using a mix of up to 50% of natural gas, while a kiln 100% hydrogen powered is under study.

The expected production, around 132 tonnes of green hydrogen per year, will replace about 500,000 cubic meters of methane gas per year. Right from the start, the blend will significantly reduce carbon dioxide emissions, saving around 900 tonnes of CO₂ per year².

This agreement is a key step along Iris Ceramica Group's decarbonization journey, which may involve the development of green hydrogen production systems in other factories of the group.

Edison Next

Edison Next supports customers and territories along their decarbonization journey and ecological transition, leveraging a platform of innovative, efficient solutions to optimize consumption and decarbonization. Technology and digital tools play a key role, to maximize competitiveness and performance. Edison Next also operates in the circular economy and environmental services sector and is committed to supporting the development of bio methane and hydrogen markets. Edison Next has the competencies and assets to supply integrated solutions through an end-to-end approach: from energy and

² Certified by LEAP s.c.ar.l. Laboratorio Energia ed Ambiente Piacenza





environmental consulting and the definition of decarbonization targets, to the identification of a roadmap and the relevant solutions, the design and implementation of solutions, and the monitoring of results. Technological innovation and research and development are essential both for seizing new opportunities in the energy sector and for successfully addressing the present challenges of climate and economic changes. This is why Edison Next is strongly committed to environmental protection, energy optimization, and the development of green gases.

Iris Ceramica Group

Sustainability, innovation, and excellent quality for pioneering porcelain stoneware slabs and surfaces: Iris Ceramica Group is a world benchmark in the design and development of high-end ceramic materials for innovative solutions and architecture, design, and furnishing projects. With over 60 years of business experience, the Group works in over one hundred countries, with a very clear vocation: to re-engineer ceramics to improve the interaction between people and the environment they live in thanks to this natural material, one of the most noble and high-performing in the world. Iris Ceramica Group, which has around 1500 employees worldwide, has its headquarters in Fiorano Modenese, and production sites in Italy, between the provinces of Modena and Reggio Emilia, in addition to two production sites abroad, in Germany and the United States. The Group works in the high-end market with different historical brands, recognized as some of the most important players on the international scene, among them is Stonepeak Ceramics Inc., the US company based in Tennessee which serves the domestic market with high-quality porcelain stoneware slabs.

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