



# EDISON NEXT WITH IRIS CERAMICA GROUP FOR *H2 FACTORY*, THE FIRST GREEN HYDROGEN-POWERED CERAMIC SLAB INDUSTRY

Milan/Fiorano Modenese, 11 July 2023 – **Iris Ceramica Group**, world leader in the production of innovative solutions and high-end, large technical ceramic slabs for the design, furnishing and architecture market, and **Edison Next**, company in the Edison Group that assists clients and territories in their decarbonisation and ecological transition journeys, announce the signature of an agreement for the development of *H2 Factory*™, the new production plant in **Castellarano** (province of Reggio Emilia) **which will use green hydrogen** – **powered by renewable energy** – **produced using a pioneering, bespoke system.** 

With this agreement, Iris Ceramica Group and Edison Next are launching the **first project for the decarbonisation of the ceramics industry using green hydrogen**. This initiative marks the start of a new journey towards the decarbonisation of a particularly energy-consuming industrial sector<sup>1</sup>, the contribution of which is decisive for achieving the energy transition objectives of both the country and the **ceramics district** – concentrated between the provinces of Modena and Reggio Emilia – **which is a strategic area** for this production sector. Skill, technology, innovation and the determination to believe in a virtuous path towards decarbonisation are the key elements put into play to bring life to the first **"green" ceramics industry.** 

"The start of this virtuous energy transition process with Iris Ceramica Group is the first significant step towards the decarbonisation of one of the country's decisive sectors," **Giovanni Brianza**, CEO of Edison Next, declared, "Iris Ceramica Group represents an excellence of Italian manufacturing around the world, and its history shows it has the ability to tackle and win this challenge."

"For energy-consuming sectors, decarbonisation means having the courage to rethink processes, intervening in the heart of production systems through the introduction of innovative technologies with the aim of guaranteeing 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 the strategy of Edison, which is investing in this carrier through numerous projects benefiting 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 decarbonisation has been completed, with Iris Ceramica Group working in the last year and a half on the feasibility study and implementation of the H2 Factory™ developed using **the highest design standards**, suitable for hosting the green hydrogen production plant. The use of this energy source in the production process in fact requires **special measures**, not only in plant terms – the kiln engineered to be powered with a blend of hydrogen and natural gas – but also in terms of **strategic construction works**, including **rainwater collection tanks**, the **photovoltaic plant on the roof of the factory** and **specific hydrogen production and storage areas**. The company has also prepared all the infrastructure for the distribution of hydrogen throughout the factory.

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

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<sup>&</sup>lt;sup>1</sup> So-called Hard to Abate





"We are looking at a new dawn for the ceramics industry and the sector as a whole. The underlying principle of our green hydrogen factory is what I define 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 CO<sub>2</sub> in the next 2 years, paving the way for the ceramic sector and the whole district, demonstrating that even a high-energy consuming industry can become a virtuous model of "net zero" energy transition. We hope that other companies will follow our example, to the advantage of the whole community, also leading 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 the Iris Ceramica Group *H2 Factory*™ in Castellarano, Edison Next will build a green hydrogen production plant based on electrolysis with a capacity of 1 MW, powered by renewable energy, as part of Iris Ceramica Group's investment of EUR 50 million for the construction of the new hydrogen-driven factory for the production of large slabs

The electrolyser will use rainwater withdrawn from collection tanks, thus fostering virtuous water management, consistently with the principles of the circular economy. The project also involves the installation, in addition to the existing 2 MW photovoltaic plant, of another photovoltaic plant producing around 1.2 MW power.

The hydrogen will be used particularly to power the kiln, using a mix of up to 50% of natural gas, while a kiln running on 100% hydrogen is being studied.

The expected production, around 132 tonnes of green hydrogen per year, will replace around 500,000 cubic metres of methane gas per year. Right from the start, the blend will eliminate carbon dioxide, with CO<sub>2</sub> savings of around 900 tonnes per year<sup>2</sup>.

This agreement is a significant step along Iris Ceramica Group's decarbonisation process, and other green hydrogen production plants may also be installed in some of the holding's other production sites.

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#### **Edison Next**

Edison Next assists customers and territories in their decarbonisation and ecological transition journey, with a platform of innovative and efficient systems for the optimisation of consumption and decarbonisation, in which technologies and digital solutions play a key role, with a view to maximising competitiveness and performance. Edison Next also works in the circular economy and environmental services, and is engaged in the development of the biomethane and hydrogen market. Edison Next has the skills and assets needed to

<sup>&</sup>lt;sup>2</sup> Certified by LEAP s.c.ar.l. Laboratorio Energia ed Ambiente Piacenza





provide integrated solutions through an end-to-end approach: from energy and environmental consulting and the definition of decarbonisation goals, to the identification of a roadmap of solutions and the design and implementation of interventions and results monitoring. Technological innovation, research and development are essential both for welcoming new opportunities in the energy field and for winning today's economic and climate change challenges. This is why Edison Next is making significant efforts in the fields of environmental protection, energy optimisation and the development of green gases.

### **Iris Ceramica Group**

Sustainability, innovation and excellent quality for pioneering ceramic slabs and surfaces: Iris Ceramica Group is a world benchmark in the design and development of high-end natural 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, recognised as some of the most important players on the international scene. Among the most prestigious in the design and architecture field: Ariostea, Fiandre Architectural Surfaces, FMG - Fabbrica Marmi e Graniti, Iris Ceramica, Porcelaingres, SapienStone and Stonepeak.

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