

# Invest KOREA Market Place

Invest KOREA Market place (IKMP) is an online business matching platform available on Invest KOREA's website with information on approximately 300 Korean companies seeking to partner with foreign investors. This month, we introduce some outstanding companies in Korea's renewables industry.

COMPANY  
**A**



CNF 2wt% suspension



CNF product image

Eco-friendly and economical process for CNF production and commercialization

Investment Requirement		Company Profile	
<b>Amount</b>	USD 3 million	<b>Patents and Certificates</b>	Registered/applied for 9 patents, including a manufacturing process and apparatus for converting biomass-derived cellulose into nanofibers, and a manufacturing device for cellulose microfibrils
<b>Investment Structure</b>	Equity Investment, Joint Venture	<b>Financial Performance</b>	(Expected sales in 2025) USD 3.98 million

**Investment Highlights**

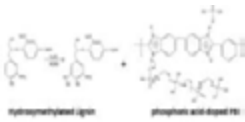
• **Growing interest in eco-friendly new materials**

Since the 'Paris Agreement' announced in 2016, 121 countries have joined the Climate Alliance with the '2050 Carbon Neutrality Goal', and various environmental measures are being taken around the world. In particular, the development of bio-compounds and new bio-materials that can solve environmental problems is actively underway. Industries such as biodegradable plastic compounds, eco-friendly coatings, adhesives, films, and functional fibers are increasing at a CAGR of 2.5% (adhesives) to as much as 21.7% (biodegradable plastics), and CNF (Cellulose Nanofiber), which belongs to a similar industry, is expected to grow rapidly from the initial KRW 100 billion to trillions of won in the next few years when it is commercialized.

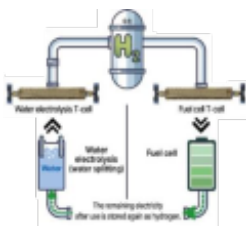
• **Advanced development of CNF (Cellulose Nanofiber), a component of plant composition**

CNF, an eco-friendly material based on sustainable plant resources, is a material that is 5 times stronger than iron even though it is lighter in weight when used as a composite material, and it can be used in various fields due to its significant improvement in absorbency, binding, and dispersibility as well as tensile strength. It has the characteristics of eco-friendly and highly absorbent materials, and is used as bending materials, composite materials, alternative materials, special materials, etc. CNF is an advanced material that is not limited to one field but is applied to a wide variety of industries. It is expected to have a positive impact on the promotion and diversification of the materials industry.

COMPANY  
**B**



Doped PBI Membrane Ion Doping Membrane Technology for High-Temperature PEM



T-Cell Platform Tubular Fuel Cell / Water Electrolysis Unit Stack

Investment Requirement		Company Profile	
<b>Amount</b>	USD 1 million	<b>Patents and Certificates</b>	Registered/applied for 13 patents, including tubular fuel cells and tubular unit stacks that integrate fuel cells and water electrolysis
<b>Investment Structure</b>	Equity Investment, Joint Venture, M&A	<b>Financial Performance</b>	(Sales in 2023) USD 0.03 million

**Investment Highlights**

• **Current Status of the Hydrogen Industry**

The hydrogen industry is growing rapidly to solve the climate crisis, and the market for water electrolysis systems that produce green hydrogen using renewable energy is also growing rapidly. Currently, alkaline, PEM, AEM, and SO methods are competing in water electrolysis, but PEM method is dominant in small to medium scale applications. The global hydrogen market is expected to grow from USD 129.2 billion in 2017 to USD 2.5 trillion in sales by 2050 growing at a CAGR of 6%. The domestic market is also expected to continue to grow to a market worth KRW 70 trillion by 2050. Among them, the market size of water electrolysis is growing rapidly, and it is expected to reach USD 50-60 billion by 2050.

• **User-friendly T-Cell and High-Efficiency Catalyst Technology for Easy Hydrogen Production and Utilization**

The company is researching electric radiation nanofiber catalyst manufacturing technology, polymer technology, tubular cell manufacturing technology, and Gwangju Institute of Science and Technology's confined catalyst technology. In particular, it aims to mass-produce and distribute tubular unit cells (also known as "T-cells") that anyone can easily produce and utilize hydrogen. In addition, it is developing a water electrolysis system based on a tubular unit cell, which can be used as a fuel cell/water electrolysis system that is free from specifications and designs.