CASE STUDY

Low-emissions steelmaking with New Zealand Steel

OVERVIEW: Accelerating the development of research which uses hydrogen instead of coal in the steelmaking process, Wellington UniVentures is managing a collaboration between Robinson Research Institute and New Zealand Steel.

THE CLIENT

For over 50 years, New Zealand Steel has been producing high quality steel products from its Glenbrook facility utilising local resources, including ironsand, limestone, coal and energy. New Zealand Steel supplies all major markets including construction, manufacturing and agriculture.

THE OPPORTUNITY

Steel is used in everything from roads and railways to earthquake resilient buildings and electric vehicles and will play an important role in New Zealand's transition to a net zero carbon economy. New Zealand Steel is committed to a decarbonisation pathway which has been set out by New Zealand Steel's parent company, BlueScope. Bluescope has set aside a 12% steelmaking intensity reduction target by 2030 and set a net zero goal by 2050 across its operations.

Robinson Research Institute researcher, Dr Chris Bumby, established a relationship with New Zealand Steel and the opportunity arose to collaborate to accelerate efforts to address the environmental issues around steelmaking.

THE SOLUTION

Wellington UniVentures facilitated this opportunity, managing the administration, negotiations and collaboration agreements, which led to $750,000 in funding from NZ Steel.

Handling the administrative side of the collaboration has allowed the Robinson team to undertake initial concept design development for a future pilot-scale reactor that could be located at New Zealand Steel's Glenbrook site.

The scale-up development of this industrial process will require further R&D investment, before it can reach a commercially investable stage. Wellington UniVentures will continue to connect and grow relationships to secure more funding and investment needed to develop this project.

Read more about this project here.

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