November 2023 Newsletter

Why Investment in Fossil Fuel Energy is Still Increasing

Global energy investment is on the rise in 2023, with clean energy expected to see a 24% increase between 2021 and 2023. Surprisingly, fossil fuel energy investment is also projected to rise by 15% during the same period. This comes at a critical juncture when urgent measures are required to cut greenhouse gas emissions by 2030. The challenge lies in the inability of clean energy investment to meet both the growing global energy demand and the imperative to replace fossil fuel energy.

Renewable energy faces obstacles in heavy industries like steel, cement, chemicals, and glass, where continuous high-intensity process heat is essential, and intermittent renewable sources fall short. Additionally, lengthy planning and regulatory approval processes hinder the timely establishment of new renewable energy sites.

Amidst these challenges, INNOVO Bio-refineries offer a promising alternative. These bio-refineries are economically viable, with profitability starting at $3,000 EBITDA per tonne of CO2 emissions for Omega 3/fish feed on a small scale and holding at $700/T of CO2 at larger scales. Notably, the bio-refineries seamlessly connect to existing heavy industry CO2 emitters without requiring process changes. They are modular, scalable, and can be built on the industrial sites of heavy industry CO2 emitters, facilitating faster planning permissions.

In contrast to the current struggle to replace fossil fuels entirely with renewables, INNOVO's bio-refineries offer a profitable means to convert fossil fuels into clean energy. This not only contributes to the increase in clean energy but also saves on the costs associated with replacing fossil fuels with renewables.

GOING TO COP28? CATCH UP WITH OUR EXECUTIVE TEAM

Rene de Murard, Chief Executive Officer, and Douglas Hassell, Chief Operating Officer, INNOVO will be participating in the upcoming COP28 event. This prestigious conference will provide a platform for our leadership to engage in crucial discussions on climate action and sustainable development.

INNOVO is committed to playing a vital role in addressing environmental challenges and advancing innovative solutions for a more sustainable future. Our participation at COP28 reflects our commitment to staying at the forefront of global efforts to combat climate change.

If you would like to meet up, please contact:

Rene.deMurard@innovo-network.com

Douglas.hassell@innovo-network.com

The Hydrogen Rainbow

Hydrogen, the universe's lightest and most abundant element, is vital in scientific, commercial, and energy applications. Different colors, such as green, blue, brown, grey, and others, are used to classify hydrogen based on its production method.

The hydrogen rainbow, with its diverse colors, will play a crucial role in achieving net-zero emissions as the world transitions away from fossil fuels toward greener energy options. While some hydrogen colors, like brown, may decline in relevance due to environmental concerns, others, such as green, are expected to gain prominence as they become more economically viable. The evolving landscape of hydrogen production reflects a broader shift toward sustainable energy sources for homes, businesses, and transportation.

Brown hydrogen, often termed "dirty hydrogen," is produced through coal gasification, resulting in a significant environmental impact due to carbon emissions.
Grey hydrogen is produced from natural gas without carbon capture and storage (CCS) technologies.
Blue hydrogen is created from natural gas with CCS to reduce its carbon footprint.
Green hydrogen is produced by electrolyzing water with clean electricity from renewable sources.
Additional variants include:
Pink hydrogen (nuclear-powered electrolysis)
Turquoise hydrogen (methane pyrolysis)
Yellow hydrogen (solar-powered electrolysis)
White hydrogen (geological hydrogen from subsurface deposits).

Interesting reading

More businesses are putting carbon reduction ahead of profit
https://www.pbctoday.co.uk/news/energy-news/more-businesses-putting-carbon-reduction-ahead-profit/134954/

Scholz pledges greater investment in Africa's green energy sector.
https://www.reuters.com/sustainability/climate-energy/scholz-pledges-greater-investment-africas-green-energy-sector-2023-11-20/

Australia's Fortescue approves $750 million investment for three green projects.

https://www.reuters.com/business/energy/australias-fortescue-approves-750-mln-investment-three-green-projects-2023-11-20/