

VN-H Power Generation Ltd

A Round 3 EIS Raise

Electro Hydrogen Generation Technology (EHG)



Elettro Produzione S.r.l 50MW Power Plant in Piombino now **CLOSED**

Having successfully met the Stage 2 Project development milestones, VN-H Power Generation Ltd proposes to raise a further £315,000 of funding to continue development of the Electro Hydrogen Generator technology (“EHG”) leading to monetisation the technology through licencing agreements with major Natural Gas Turbine Generator manufacturers and Power Station operators. The manufacturers are under significant pressure from operators to produce “clean” and more “fuel efficient” generating plant following the decision of governments around the world to reduce allowed CO₂ emissions and encourage increased fuel efficiency. Failure on these levels for the manufacturers would result at best in loss of market share, or worse, no sale of equipment. For the existing operators the choice is even simpler; find a cheaper fuel, clean up, or shut generation down, because after emission fines operation will not be commercially viable.

Laboratory & Test
Bed Proven
Technology

Proven Market
Opportunity

Licence Revenue
Model

What is the opportunity & why does it exist?



- ✚ Production of hydrogen by splitting H₂O using EHG technology driven by natural gas generated waste energy streams
- ✚ Perpetually rising European natural gas prices forcing co-firing operators to close generation plant
- ✚ EHG technology replaces natural gas with onsite produced hydrogen & oxygen for immediate co-firing or resale
- ✚ VN-HPG will charge 50% of the Platts natural gas index price for the gases produced

What is the technology and how proven is it?



- ✚ Electro Hydrogen Generation
- ✚ 4th generation EHG-M unit built & tested by Intertek Tickford
- ✚ Tests witnessed & assessed by Keith Scott Professor of Electrochemical Engineering at Newcastle University
- ✚ Energy conversion efficiencies approaching 95% recorded
- ✚ Output should improve significantly when scaled in size
- ✚ The design of a series of stage revised EHG-M units; each being larger than the previous unit with continuous characterisation improvement using data obtained from the previous sequential output test results.
- ✚ 1st scaled version of the finalised EHG design manufactured
- ✚ Preliminary mechanical and longevity testing completed
- ✚ Preliminary alkali electrolyte testing completed with initial on target results achieved.

How will it make money and when?

- ✚ Build into an existing 50MW power plant in Italy and operate it
- ✚ Provide the technology to operators upgrading plants
- ✚ Licence technology to new-build manufacturers & maintainers of existing plant (Negotiations currently underway with Chinese Manufacturers)
- ✚ 2-4 years in development before revenues
- ✚ 3-7 years in revenue before potential investor exit

For further information on the VN-H Power Generation Ltd opportunity or any other VN-Capital Partners sponsored project please contact us on: 0207 993 5307 or email to EIS@vn-cp.co.uk