SSD 2024
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Invited Speaker

Andreas Bodén

SVP & CTO
PowerCell Group

Ready for the Marine Future: Harnessing Advanced Fuel Cell Systems with Renewable Fuels
S0404

TALK TITLE

Ready for the Marine Future:
Harnessing Advanced Fuel Cell Systems with Renewable Fuels

ABOUT

- M.Sc Chemical Engineering 2003 & Ph.D. Chemical Engineering Fuel Cells 2007, KTH (Royal Institute of Technology), Sweden.
- Trainee, Central Research Institute of Electric Power Industry, 2005, Japan
- Project Manager Fuel Cell, Volvo Technology Corporation, 2007-2009, Sweden
- SVP & CTO PowerCell Group, 2009-present, Sweden
- Board Member Hydrogen Sweden 2010-present, Sweden

ABSTRACT

The maritime industry is facing new challenges. IMO has set a target for the maritime industry to cut emissions by 50% by 2050. Hydrogen and fuel cells in combination with renewable energy can offer a value chain with zero emissions while delivering the same performance as today's conventional fuels.

PowerCell has designed and developed our marine fuel cell system according to marine rules and regulations in cooperation with classification societies and customers. The systems provide 200kW of net electric power output and can be connected in parallel to achieve megawatt-sized installations. The system is also prepared to work with hydrogen (liquid, compressed, and from reformed methanol or ammonia) enabling compatibility with future renewable fuels. PowerCell is currently integrating and installing several large-scale fuel cell systems in the marine segment.