Stakeholder perspectives on alternative fuels and decarbonisation of the shipping industry

Is there a role for sustainable biofuels in the decarbonisation of shipping?

Andrew Stephens

Executive Director Sustainable Shipping Initiative

Symposium on IMO 2020 and alternative fuels IMO HQ, London 17-18th October 2019

sustainable

shipping

initiative

SSI: Who are we?



SSI Vision2040: Sustainability = Success

8 GOOD JOBS AND ECONOMIC GROWTH Careers

Providing safe, healthy and secure work environments so that people want to work in shipping, where they can enjoy rewarding careers and achieve their full potential.

Earning the reputation of being a trusted and responsible partner in the communities where we live.

Transparency and accountability drive performance improvements and enable better. sustainable business decision making.

> Developing financial solutions that reward sustainable performance and enable large scale uptake of innovation. technology, design and operational efficiencies.

Proactively contributing to the responsible governance of the oceans.

work and operate.

4 LIFE BELOW 16 PEAGE AND JUSTICE 13 CLIMATE

Oceans

Community

9 INNOVATION AND INFRASTRUCTURE

8 GOOD JOBS AND Economic growth

sustainable shipping initiative



Changing to a

diverse mix of

energy sources,

using resources more efficiently

and responsibly,

and dramatically reducing greenhouse gas emissions.

Finance

Transparency

16 PEACE AND JUSTICE

12 RESPONSIBLE





How does the SSI work?

A multi-stakeholder initiative that brings together **like-minded and ambitious leaders spanning the entire shipping value chain** to contribute to – and thrive in – a more sustainable maritime industry.

through

Leadership: Demonstrating leadership through our members' sustainability initiatives to inspire change by sharing learning and best practice

Collaboration: Combining the SSI's expertise and knowledge to address specific challenges and working together to develop tangible solutions for adoption by the industry to overcome barriers to change

Voice of the industry: Driving and convening debate on key sustainability issues to encourage long-term thinking across the industry

sustainable shipping initiative



Decarbonisation

sustainable shipping initiative

sustainable shipping initiative





Zero Emission Vessels, what needs to be done? Report prepared for Sustainable Shipping Initiative

Report produced by Lloyd's Register Group and University Maritime Advisory Services



Published in May 2018 This report concluded that:

"advanced biofuels may represent the most economically feasible zero-emission alternative for the shipping industry.

The fact that biofuels can be used in a way that very closely mirrors current technology, i.e. through internal combustion, means that associated additional costs are kept to a minimum of the fuel price itself.

Under the scenarios projected in this study, these costs are within the realm of acceptability for many in the industry."



Published in May 2018

Biofuels are also the most 'technologically ready' of the various alternatives being proposed for longrange shipping

(batteries can and are being used on short-range ferries, but they are unlikely to service long range routes due to limits on energy density).

Biofuels are already available and being used (albeit typically in experiments and pilots).

As such, they hold the potential to be deployed at scale more rapidly than ammonia or hydrogen electro-fuels.







R Lloyds UMAS

Published in May 2018

However, biofuels have also proven highly controversial, with questions raised not only about adverse sustainability impacts arising from their use, but also whether there will be sufficient availability to meet the needs of a variety of different sectors.

The Zero Emission Vessels Report went on to note that biofuels:

"may not be the answer to the question of decarbonisation, due to two important, and coupled, considerations – sustainability and availability."

sustainable shipping initiative





R Lowes UMAS

2019 – Multi Stakeholder convening on Biofuels – Sustainability and Availability



Thank you

www.ssi2040.org

info@ssi2040.org @SustShipping

Registered charity no: GB 162 3473 19

sustainable shipping initiative