The engine industry confronts its future at the 29th CIMAC World Congress

With the theme, “Meeting the Future of Combustion Engines” the CIMAC World Congress took place in Vancouver, Canada, from 10th to 14th June 2019, again demonstrating its unique facility for bringing together the large engine industry’s stakeholders. Moreover, while the minds of arriving delegates were already strongly focussed on the issues facing the large engine industry, the actions of climate change protesters around the world added a further incentive to make the most of the large engine industry's foremost forum for information exchange and consensus forming.

In total more than 800 participants, exhibitors, and speakers from all parts of the world came to Vancouver for CIMAC’s triennial congress, and no one left in any doubt that the reducing greenhouse gases (GHG) is the biggest challenge facing the large engine industry. Simultaneously the engine industry is contending with the “Initial Strategy” on decarbonization adopted by IMO in 2018, which for the targets total annual GHG emissions from international shipping as a whole, while the 2016 Paris Agreement on climate change calls for efforts to phase out GHG emissions in their entirety.

Transitioning the large engine industry

These two requirements have led to predictions that new ships will need to be completely climate-neutral by as early as 2030. What is undoubtedly true is that the large engine industry is facing paradigm changes, and this was reflected in the majority of papers in one way or another.

Mirroring the fact that engine efficiency has always been a primary goal of researchers and developers, a host of papers presented advances in traditional technologies with the potential to deliver useful contributions to GHG reduction via improved fuel efficiency.

On the other hand, many of the papers and the Congress’ panels and speeches, of views, looked at the radical solution: zero carbon fuels or fuels with greatly reduced CO2 emissions. The open panel discussions, in particular, led to controversial exchanges on suitable solutions for the future, including, prominently, the “power-to-fuel” strategy.

The unavoidable conclusion? Achieving the levels of GHG reduction prescribed is a mammoth undertaking and there is, and will be, no all-embracing “silver bullet” that will enable the IMO and Paris goals to be met. Nonetheless, from today’s perspective, options such as biofuels offer a partial answer while synthetic fuels will be necessary to ensure the engine industry can meet all expectations.

Other major themes

The importance of the GHG debate only partially distracted from other major industry concerns. The subjects scheduled for discussion and debate encompassed matters as varied as the vital interface between makers and users: Operators’ Voice and Case Studies from Operators; Future Challenges; Ideas for Future Developments; Regulations; Global Trends; and Enhancing Proven Technologies.

2020 Sulphur Cap

Affecting an estimated 70,000 vessels. the immediacy and extent of the IMO’s Sulphur Cap, reducing sulphur in fuels from 3.5 to 0.5% and coming into effect on 1 January 2020, meant that solutions to the new legislation were extensively presented in papers and intensively discussed in the forums.
Digitalisation

With its wide implications for all aspects of shipping, digitalisation represents another huge transformation, but one which is already underway. Accordingly, the sessions Digitalization and Connectivity led the technical programme, followed by the similarly promising efficiency enhancers, System Integration, Electrification and Hybridisation. The strong interest in these subjects was reflected in the animated exchanges of views at the panel where both these themes were expounded.

Taking stock

Despite the important – possibly existential – themes under discussion the 29th CIMAC World Congress was a great success in all the other ways that its predecessors have always excelled. The social programme and events provided outstanding opportunities for networking in a relaxed atmosphere at a prestigious, efficiently organised venue in one of the world’s most attractive, scenic cities and port, with a strong link to engines and power systems.

All in all, a great event that sent delegates back to their day-to-day work invigorated with new ideas, while CIMAC and industry stakeholders left with a strong awareness of the tasks that have to be dealt with in the next three years and beyond. Our thanks go to all who made this happen, not only to CIMAC’s US NMA and Canadian corporate members for their efforts.

About CIMAC

CIMAC is the leading global non-profit Association of the Internal Combustion Machinery Industry consisting of National Member Associations and Corporate Members in 26 Countries in America, Asia and Europe.

For information about the CIMAC Congress 2019 please visit https://www.cimaccongress.com.

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