

TOWARDS A ZERO-EMISSION INLAND WATERWAY TRANSPORT BY 2050: CCNR WORKSHOP ON “ALTERNATIVE ENERGY SOURCES FOR ELECTRICAL PROPULSION SYSTEMS IN INLAND NAVIGATION”

Ref: CC/CP (21) 03



On 20 April 2021 the Central Commission for the Navigation of the Rhine (CCNR) organised an online [workshop on alternative energy sources for electrical propulsion systems](#), the aim of which was to demonstrate that electrical propulsion systems using alternative energy sources will play a pivotal role in reducing pollutants and greenhouse gases in inland navigation.

Thanks to the participation of various speakers, as well as five panellists and over 180 attendees in all, this workshop was a great opportunity to learn more about innovative technologies, as well as the technical, economic, organisational and legal challenges to implement them. Existing business cases for alternative fuels (electricity, hydrogen) and different types of technologies (hybrid engines, fuel cells or batteries for electricity supply) were presented during the workshop. Regulation, funding and, of course, an overall acceptance in terms of return on investment or risk buffer were cited as some of the main challenges when developing pilot projects.

The panel discussion allowed different stakeholders - from energy producers to users - to explore the current energy demand and investigate what this might look like in the future. One of the key conclusions was to avoid focusing on one alternative energy source only (“No one size fits all”) and to remain technology neutral. Furthermore, focus should be on existing bunkering infrastructure and how this can be re-used in the future. It should be noted, however, that innovative projects imply economic viability pressures, be it through uncertainties on the demand side or the considerable additional cost such new technologies incur. In summary, possibilities for green inland navigation exist and should be seen as pioneering to allow, for example, spill-overs into the maritime sector.

Energy transition will also depend on the availability of alternative energy sources. A brief insight into the energy supply chain was also shown during the event. Indeed, new energy sources require bunkering facilities. The availability of a well-developed infrastructure is necessary for a smooth implementation. The workshop identified the different infrastructure needs of energy carriers, such as hydrogen and electricity, and offered waterway managers and bunker station operators perspectives on future infrastructure demands.

The CCNR is convinced that the results of this workshop will contribute significantly to the ongoing reflections on the subject at both the Rhine and European levels and will effectively support the energy transition of the inland navigation sector. Indeed, with the signing of the [Mannheim Ministerial Declaration](#) in 2018, the CCNR Member States reaffirmed their commitment to largely eliminate greenhouse gas and pollutant emissions in inland navigation by 2050.

Building on the Mannheim Declaration and its key objectives, the CCNR has already launched an ambitious and comprehensive research project on [financing the energy transition](#) and has been working on a roadmap towards emissions reductions, to be adopted at the end of 2021. This roadmap for reducing emissions in inland navigation will provide useful policy guidance to Member States, international organisations, the sector and other stakeholders on how to advance together towards an even more environmentally friendly transport mode.

ABOUT THE CCNR

The Central Commission for the Navigation of the Rhine (CCNR) is an international organisation that exercises an essential regulatory role in the navigation of the Rhine. It is active in the technical, legal, economic and environmental fields. In all its areas of action, its work is guided by the efficiency of transport on the Rhine, safety, social considerations, and respect for the environment. Many of the CCNR's activities now reach beyond the Rhine and are directly concerned with European navigable waterways more generally. The CCNR works closely with the European Commission as well as with the other river commissions and international organisations.

The online event also confirmed the role of the CCNR as a platform of choice for exchanging information and helped increase awareness of the entire supply chain, from the energy producer to the vessel operator. Indeed, only together can inland waterway transport become the zero-emission transport mode we are aiming for!

The workshop presentations are available via the following link: <https://www.ccr-zkr.org/13020154-en.html>.



Palais du Rhin
2, place de la République - CS10023
F - 67082 Strasbourg Cedex

Tel. **+33 (0)3 88 52 20 10**
Fax +33 (0)3 88 32 10 72

ccnr@ccr-zkr.org
www.ccr-zkr.org