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Ministerie van Infrastructuur en Waterstaat Rijnstraat 8, 2515 XP Den Haag, The Netherlands **ENERKEM** 1130 Sherbrooke Street West, Suite 600 Montréal, Québec, H3A 2M8, Canada

SUBJECT: Enerkem's comments on the Amendment to the Energy Transport Decree REDIII

Enerkem welcomes the Netherlands' commitment to remain at the forefront of Europe's energy transition by being the first Member State to transpose the revised Renewable Energy Directive ("REDIII") in domestic law. The necessity to accelerate the energy transition and to reduce reliance on fossil fuels calls for decisive actions to build resilient supply chain.

Enerkem is a Canadian company that has developed and commercialized a proprietary gasification technology to produce advanced biofuels, recycled carbon fuels and circular chemicals from waste and residues. Our solution helps diversify energy sources and offers a sustainable alternative to landfilling and incineration.

Enerkem's technology is currently at the heart of the Varennes Carbon Recycling biorefinery project in Varennes, Quebec, Canada. The plant will convert a combination of forest biomass residues and non-recyclable residual materials into 100,000 tonnes per annum of bio and circular methanol. The 1.3B\$ (Canadian dollars) project is under construction and targets to start production in early 2026. In El Morell, Tarragona, Spain, Enerkem's technology will be used in Repsol's Ecoplanta project converting non-recyclable fractions of waste into circular chemicals and advanced biofuels. Located on a petrochemical complex, the facility will produce annually 237,000 tonnes of methanol and recycle over 70% of the carbon present in the residual waste materials. The project has also been selected by the European Commission's Innovation Fund, for a grant of 106M€.

The transposition of REDIII is a critical step to strengthen the Netherlands standing as a European leader in sustainable fuels. However, the current approach in the *Amendment Decision* falls short of creating the market condition to support long-term offtake agreements for sustainable fuels and incentivise investments.

Supporting the Uptake of Sustainable Fuels in the Maritime Sector

In the *Amendment Decision*, the Ministry has chosen to take advantage of the derogation in REDIII that allows Member States to cap the energy supplied to the maritime transport sector at 13% of the gross final consumption of energy. This has led the Ministry to propose a GHG reduction obligation in the maritime sector of 3.6% in 2026, growing to 8.2% in 2030. This obligation is below the overall transport GHG intensity reduction of 14.5% by 2030 provided in the REDIII and is therefore compensated by a higher obligation in the road sector.



The adoption of a maritime-specific GHG reduction obligation is a clear step in the right direction. However, in the near term, obligated parties can address the level of GHG reduction proposed by the Ministry with minor adjustments from their current practices. To transition away from fossil fuels and towards sustainable maritime fuels, such as low-carbon intensity methanol and ammonia, regulatory obligations should drive obligated parties to look beyond short-term adjustments to their fuel procurement strategy. Strengthening the GHG reduction obligation will also accelerate the deployment of locally produced sustainable marine fuels.

Enerkem believes that the Ministry should adopt more ambitious GHG reduction targets on obligated parties that will ensure a shift in their fuel procurement strategy toward long-term sustainable solutions.

Enabling Advanced Biofuels and its By-Product to Play their Role

Enerkem's gasification technology enables the conversation of a wide range of waste that is currently sent to incineration facilities. Although recycling practices are set to improve the share of recyclable waste, sorting centres will always discard certain categories of waste unfit for mechanical recycling. Chemical recycling is a natural complement to mechanical recycling and can act as a backstop in waste treatment to avoid incineration.

Unrecycled waste contains biogenic and non-biogenic carbon (or *recycled carbon*). The fraction of each portion is determined with radiocarbon testing (¹⁴C testing). To avoid emissions from the combustion of recycled carbon, the preferred market for this portion of the final product is the chemical sector. This route allows recycled carbon to be reprocessed as a circular chemical into value-added products and replace fossil-based chemicals. However, the current lack of incentives and/or obligations in the chemical sector to drive demand toward recycled products does not support the business case for reprocessing recycled carbon as a chemical. Until regulation drives demand for recycled products in the chemical sector, recycled carbon fuels should act as a transition solution in the transport sector, especially hard-to-abate sectors.

Recycled carbon fuel is included in the REDIII as an energy source, where Member States may take it into account when calculating their renewable energy share. The European Union Commission has adopted important guardrails to ensure the environmental integrity of recycled carbon fuels (see <u>Delegated Act establishing a minimum threshold for GHG emissions savings of recycled carbon fuels</u>) and support their uptake in the transport sector.

As the Netherlands moves to a GHG reduction obligation, Enerkem submits that the Ministry should heed the contribution from all transition solutions that contribute to the emergence of a resilient sustainable fuel supply chain. As a by-product of advanced biofuels, recycled carbon fuels can provide significant GHG emission reduction in hard-to-abate sectors. In fact, the RED GHG reduction threshold is higher for RCF (70%) than for advanced biofuels (65%), and equal to RFNBO (70%). Enerkem therefore recommends that recycled carbon fuels be allowed to generate emission reduction units (EREs).

Enerkem expresses its gratitude to the Ministry of Infrastructure and Water Management for its consideration.