

## Mura and KBR alliance announce licence agreement with Mitsubishi Chemical Corporation to take advanced recycling solution for plastics, with Licella's Cat-HTR™ technology at its core, to Japan

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- Pioneering Cat-HTR™ technology can recycle all forms of plastic - including multi-layer, flexible plastics.
- Mura's HydroPRS™ (Hydrothermal Plastic Recycling Solution) process utilises Cat-HTR™ technology at its core.
- Cat-HTR™ platform was developed and is owned by Licella Holdings (Licella), the largest single shareholder in Mura.
- Mura and KBR have signed their first licence with Mitsubishi Chemical Corporation (MCC).
- This is a major milestone in Mura's rapid global rollout to achieve one million tonnes of capacity by 2025, with Asia representing a major market for the advanced recycling of plastics.

Mura Technology (Mura), UK-based developer and licensee of the Cat-HTR™ platform for post-consumer plastics, and its global licensing partner KBR, has today announced an agreement with Mitsubishi Chemical Corporation (MCC), to deploy its advanced plastic recycling process, with Licella's Cat-HTR™ technology at its core, in Japan.

Licella's patented [Catalytic Hydrothermal Reactor \(Cat-HTR™\)](#) platform uses supercritical water to economically convert waste plastics, otherwise destined for landfill, into oil to produce fuels, chemicals and new plastics - helping to unlock a circular economy for all plastic.

Licella successfully completed a series of trials at their Cat-HTR™ facility in Australia for MCC, on behalf of Mura. These advanced recycling trials formed part of MCC's detailed feasibility study of Mura's HydroPRS™ process with the Cat-HTR™ at its core, which resulted in this first licence. Mura's global licensing partner, KBR, have provided engineering support on the project feasibility with MCC.

Although Japan currently recycles 84% of its plastic waste<sup>1</sup>, the majority of this is combusted to create energy from waste and is not reprocessed back into the plastics supply chain<sup>1</sup>. Mura's advanced recycling process, with Cat-HTR™ at its core, offers a deliverable solution for Japan to meet its 2030 goal of reducing disposable plastic waste by 25%.

Importantly, the plastics produced using these recycled products are expected to be suitable for use in food-grade packaging, unlike most conventional recycling processes. Utilising the Cat-HTR™ technology at the core of Mura's process means that there is no anticipated limit to the number of times the same material can be recycled – meaning it has the potential to significantly reduce single-use plastics and make the raw ingredients for a circular plastics economy. In addition, advanced recycling processes are expected to save approximately 1.5 tonnes of CO<sub>2</sub> per tonne of plastic recycled, compared to incineration of unrecycled plastics.<sup>2</sup>

**Shigeru Handa, Chief Operating Officer, Basic Materials Domain, Mitsubishi Chemical Corporation, said:** *“This new licence agreement between MCC, Mura Technology and KBR comes at a pivotal time for the natural environment, as we face a plastic pollution crisis. MCC is committed to developing and introducing new and innovative technologies into plastic waste infrastructure and following our research and feasibility study into the HydroPRS™ process, we feel this agreement is an extremely positive step towards our sustainability goals.”*

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<sup>1</sup> Statista (2021)

<sup>2</sup> Independent analysis by CE Delft, the independent research and consultancy organisation specialised in developing innovative solutions to environmental problems (2020).

*“The scalable nature of the process and its ability to recycle a much broader scope of plastic is fundamental to the future of plastic recycling and we are very pleased to be working with both Mura and KBR.” Taken from Mura’s [press release today](#).*

Mura’s first advanced recycling plant to use the Cat-HTR™ technology at its core is [under development](#) by licensee [ReNew ELP](#) with the first Cat-HTR™ in Teesside, North East England. On completion, the site will be able to process 80,000 tonnes of plastic waste per year.

Globally Mura plans to have a recycling capacity of 1 million tonnes of plastic waste in operation or development by 2025.

### **Media Enquiries**

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### **About Licella**

Licella’s patented Catalytic Hydrothermal Reactor (Cat-HTR™) is the World’s most commercially advanced hydrothermal liquefaction (‘HTL’) technology – the ‘next-generation’ of advanced recycling, chemically transforming low value feedstocks into oil, which can be refined to high value fuels and chemicals. With more than A\$100M invested over 13 years, the Cat-HTR™ technology is a commercial ready solution proven across a wide range of feedstocks, including post-consumer plastic and post-consumer biomass.

For more information on Licella and its Cat-HTR™ technology, visit [www.licella.com](http://www.licella.com)

### **About Mitsubishi Chemical Corporation**

Mitsubishi Chemical, as a core operating company of the Mitsubishi Chemical Holdings Group, seeks to provide solutions to environmental and social issues and to contribute to the sustainable development of people, society and the Earth through its businesses built on a foundation of chemistry. In this way, we aim to realize KAITEKI - a condition that contributes to sustainable development that is optimal for people, society, and the Earth.

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