

NUS - College of Humanities and Sciences Case Competition 2022

Problem Statement

With rising consumption and a prevalent throw-away culture, countries are now facing a global waste crisis. In Singapore, the amount of waste generated locally has increased sevenfold over the past 40 years. Our only landfill, the Semakau Landfill, will run out of space by 2035, based on the current waste disposal rate, even with incineration.

It is clear we need a paradigm shift - to move from a linear approach of take, make and throw, to a circular one where waste becomes resource and is reused over and over again. The Ministry of Sustainability and the Environment (MSE) and the National Environment Agency have taken major steps to catalyse Singapore's transition to a circular economy.

The MSE launched the Zero Waste Masterplan in 2019 to lay out our vision and strategies. The Masterplan sets out a target to reduce the amount of waste going to our landfill by 30 per cent by 2030. Under the Singapore Green Plan 2030, we will frontload our efforts to achieve a 20 per cent reduction by 2026. We also aim to achieve a 70 per cent overall recycling rate by 2030.

As the leading environmental services provider in Singapore, SembWaste manages the collection, processing, recycling and disposal of solid waste. In addition, the ability to harness precious resources such as energy and biomass from waste means that a part of the waste stream creates value and reduce the amount of waste at the same time.

For the 2022 NUS – CHS Case Competition, these two competition partners, MSE and SembWaste, will task the participants to provide solutions on the reduction and management of waste in Singapore, for a future “Towards Zero Waste”.

The global e-commerce market has grown drastically, fuelled further by the COVID-19 pandemic. While e-commerce offers greater convenience to consumers, it is also driving up the generation of packaging waste. **(Problem 1:) Develop a case on how a company in the e-commerce value chain (e.g. retailer, platform owner, logistics provider, etc) can minimise e-commerce packaging waste.**

While we can study overseas' successful examples of waste management to bring about circularity and higher recycling rates, Singapore's market size and circumstances including recycling behaviour suggest a more localized approach is required to be effective. **(Problem 2:) Come up with a plan on how waste collectors like SembWaste, who are faced with challenges such as talent attraction and retention coupled with higher diesel price pressure and Progressive Wage Model, can help Singapore move towards Zero Waste Nation, achieving the goals laid out in Zero Waste Masterplan and do it in an economically viable fashion.**

Team formation: Form a team of at least 1 person. Free to add or change team members throughout the duration of the case competition, but be sure to acknowledge every member that contributed to the final version of the submitted case. All team members should be current NUS students.

Preliminary round: Provide ONE solution to each of the 2 case problems. Create a compelling argument with no more than 3,000 words (this is the total word limit for the 2 cases together). Where appropriate, use (info-)graphics to support your arguments. The case will be evaluated by a panel of NUS faculty judges. We look for in the proposed solutions: Ingenuity, practicality, and enforceability. We prefer solutions that are rigorously argued and well supported by research, facts and statistics.

Due date for the case to be considered for preliminary round judging: 4 Sep.