ENERGISING JAMAICA'S CIRCULAR ECONOMY

With origins that can be traced back over eight decades, RYCO-Jamaica Ltd (RYCO-JA) is today the Caribbean island's leading player in the collection, transportation, processing and recycling of Annex 1 ship-generated petroleum waste. It also recycles cooking oil from Jamaica's restaurants, alongside rendering animal by-products. Director of Operations, Mr Kyle Tofte Mullane, reveals more on his multifaceted fourth-generation family business, whose talent in transforming industry's waste into renewable commodities is coming to the fore amidst tightening environmental regulations, a sharpening corporate focus on sustainability, and the drive towards achieving a circular economy.

ore than ever, companies are today measuring and disclosing their performance around envionmental, social and governance (ESG) issues. In so doing, many businesses are unlocking the ability to simultaneously reduce financial risks and uncover business opportunities. Moreover, in recent years, record amounts of capital have been flowing towards companies who place sustainability front and centre in their operations, providing yet further impetus to pursue such goals.

Naturally, additional encouragement comes from tightening regulations across a full spectrum of industries – not least in the marine and shipping sector. Measures introduced by the International Maritime Organization (IMO) from 1973 onwards under the MARPOL convention have gone a long way to tack-

ling pollution from ships by oil, in areas that span the safe design of oil tankers through to cutting operational pollution from vessels in general. Accommodating any vessel wishing to discharge ship-generated petroleum waste, Port Reception Facilities today play a crucial role towards achieving full compliance with MARPOL's Annex I regulations – and in Jamaica, that Port Reception Facility provider is RYCO-JA.

Authorised by The Maritime Authority of Jamaica, and abiding by all International Conventions, the longestablished specialist in Annex 1 ship-generated waste provides vital assistance in the proper disposal of this by-product to minimise its impact across the region. Yet RYCO-JA's unique expertise transcends recovery, with the collected waste petroleum thereafter transformed into a valuable commodity – Heavy Fuel Oil **N**

(HFO #6) – utilised as a power source in local factories across the island.

In parallel, RYCO-JA's activities in waste streams generated by the restaurant sector (used cooking oil) and rendering industry (poultry viscera) are also very well established on the island. Permitted by the National Environment and Planning Agency (NEPA), the firm's daily pick-up schedules do much to keep Jamaica's liquid and solid waste streams environmentally sound. And likewise, such waste is later trans-



formed into useful commodities – poultry by-product meal and yellow grease – to fulfil local demand for such feed additives. Indeed, the old adage of 'living off the fat of the land' could be no truer than for RYCO Jamaica Ltd – one of the most prominent players striving to support the island nation's selfsustainability today.

Eight decades of expertise

While RYCO-JA may be approaching a milestone 25 years since its operations began in Jamaica, the firm's Director of Operations tells us that the business can actually be traced back much further in time. "Founded by my great grandfather, Bernt Andreas Tofte – an immigrant from Norway – back in 1936, the company B.A Tofte Co. (BATCO) focused on rendering viscera produced from the Long Island Duck Industry in New York State," he reports. Certainly, such raw material was in plentiful supply back then, given that Long Island's Peking duck had become a highly sought after poultry breed - particularly amongst restaurant chefs – on account of its swift maturation and tender flesh. "At that time, the ducks' feathers and down were also utilised and put toward the efforts of World War II," informs Mr Tofte Mullane. Such material was chiefly repurposed as one of the most efficient fillers for sleeping bags - an essential piece of kit for troops in cold climates.

By the early 1960s, Long Island farms were processing roughly 7.5 million ducks per annum, positioning Long Island as the top duck-producing region in the United States, and further supporting the robust growth prospects of B.A Tofte Company. "Meanwhile, as the fast food and restaurant industries began to take shape in the Sixties, our services extended beyond the Tri-State area [New York, New Jersey and Connecticut] with the collection of used cooking oil," he continues. "And in 1996, operations of a similar endeavour commenced in Jamaica, in response to the expansion of the tourism and hospitality sector there." The year 2008 marked the firm's inaugural foray into the collection and disposal of waste petroleum - in accordance with MARPOL 73/78 Annex 1. Mr Tofte Mullane's business has since developed the capability to provide such services to all ports and power generation facilities across Jamaica, as well as being authorised by the Maritime Authority of Jamaica to operate as a Port Reception Facility and accommodate any vessel wishing to discharge ship-generated petroleum waste. "The waste oil generated from vessels



provides us with a suitable raw product to recycle and convert back into a renewable fuel that can then be utilised by local industries such as bauxite and sugar mills," he tells us. "And by acting as a Port Reception Facility for the regional disposal of this waste, our company assists in preserving the Caribbean's marine environment by effectively eliminating the pollution of ship-generated oily waste.

"Today we have grown to become the Recycling Corporation of Jamaica (RYCO-Jamaica Ltd, or RYCO-JA), servicing island-wide collection of shipgenerated Annex 1 waste oil, used cooking oil, and poultry by-products," he summarises. "Diversified into energy and feed additives, we transform waste by-products into viable commodities - our activities effectively prevent contamination and pollution throughout the island.'

Site of sustainability

In order to support such a diverse array of activities, RYCO-JA has both built out and finely tuned its facilities and assets over the decades. Back in 2005, the firm moved to its current location in Tollgate, in the Jamaican parish of Clarendon, with facilities and landspace spanning 18 acres to both accommodate ****



operational expansion and provide a required buffer, given the various odours emitted from its processing operations. That complex currently features two main processing buildings, an LPG Boiler House, and a Truck Shop. "Building #1 houses our Rendering Plant, while Building #2 consists of the Waste Oil Processing Facility, as well as our heavy fuel oil boilers," Mr Tofte Mullane tells us.

In addition, RYCO-JA's logistical fleet comprises several specialist collection trucks for the firm's rendering division, while its waste oil collection fleet consists of road tractors and tanker wagons.

"Recent investments in transportation equipment, LPG boilers, and infrastructure will help to extend the reach of our current services," informs the executive,



adding that the utilisation of gas boilers enables RYCO-JA to take a proactive stance towards reducing its own carbon footprint away from the use of Heavy Fuel Oil.

One man's waste is another's treasure

While Mr Tofte Mullane cannot go into detail regarding specific contracts, he assures that RYCO-JA's working relationships with both local and international shipping associates continue to improve year on year - testament to its standing amongst the region's business community and the ever-strengthening focus of industrials on ramping up sustainability. "Ultimately, the co-operation of major shipping lines, maritime regulators, and customers has created a service supply chain that allows for Annex 1 generated waste oil that needs to be disposed of to actually be utilised in an environmentally sound way," he points out.

"On the other side of the business, there are around 400 hotels in Jamaica, and we serve them all with our oil waste collections," he continues. "Obviously, given the current situation with the coronavirus pandemic, those hotels have recently been closed. However, we're actually experiencing an increase in demand and activity on the shipping side of the business at present." And at the end of the process, customers for the



renewable products that RYCO-JA produces from such waste streams include local bauxite and sugar mills, both of which utilise steam to generate heat.

Across various sectors of the economy, the relationships that RYCO-JA has nurtured with local businesses have clearly been crucial to the firm's longevity, as has its major collaboration with JAMPRO - a government agency that promotes business opportunities in export, alongside investment to the local and international private sector. "JAMPRO have been involved with RYCO-JA Ltd ever since our operations commenced on the island nearly 25 years ago. They've provided us with numerous contacts, as well as integrity checks, when complimentary business situations present themselves."

No short-cuts on environmental regs

As RYCO Jamaica approaches one-quarter of a century in operation next year, and with a heritage that can be traced back many more decades than that, what factors



does Mr Tofte Mullane think have been most important to the company's success and expansion? "First and foremost, we take no short cuts with environmental regulations," he responds. "Coming from a rendering based background, we've long been engaged in the recovery of waste by-products that are then processed into renewable resources. Such product recovery obviously also brings forth savings to raw material suppliers and finished product users alike."

Sustainability as a tenet is clearly ingrained in RYCO-JA's business model, and the firm's activities evidently help customers to comply with tightening environmental regulations. "The recycled Heavy Fuel Oil that we market, for example, is compliant with new IMO standards," the OD advises. "And use of our recycled fuel – containing a 0.5-per-cent sulphur content, as required by the global shipping community - enables our customers to be compliant with global goals to reduce the amount of particulate matter and sulphur released into the atmosphere." ****



And without doubt, RYCO-JA's waste recovery, processing and recycling activities go further than most sustainability efforts by playing a crucial role in boosting the circularity of resources and effectively 'closing the loop' in the local economy. "Jamaica being the pearl of the Caribbean, all products that we create are utilised on the island, which obviously reduces the need for imports, boosts self-sustainability and supports the local economy," Mr Tofte Mullane asserts. "It also helps to put Jamaica ahead of the game when it comes to more stringent environmental regulations upcoming in the years ahead."

Collection, transportation and processing expertise

Given its diverse operations and highly integrated nature, it is little wonder that the skillsets of RYCO-JA's workforce are equally varied - ranging from experienced drivers, to boiler operators, metal fabricators, and processing engineers. "All training is undertaken on-site in Jamaica, as the services and products we handle require direct, on-the-ground experience to avoid any mishandling of a situation or customer," informs the Operations Director. "And as a 'three-fold' company, the activities of collection, transportation and processing are all core elements of our company. No system is more important than the next, as all require synergy in order to create the desired outcome."

Working so closely with its customers has not only enabled RYCO-JA's team to hone its expertise but also to gain the confidence of the market. "It took several years for the general public to understand the basic services that our business provides," admits Mr Tofte Mullane. Yet almost 25 years down the line, it seems clear that the firm is now well known island-wide in its specialist fields. "Still to this day, we're constantly referred to as the 'Oil Mon' or 'Mr RYCO', which I must admit has something of a ring to it," he quips. "Working hand in hand with local customers everyday provides the confidence and expertise that's undoubtedly necessary for a business such as ours to exist. And as Jamaica grows, we continue to grow with it – and we look forward to helping the island manage its recyclable waste in the years ahead."



A resourceful outlook

In terms of future plans, Mr Tofte Mullane advises that his company will pursue a strategy focused on further upgrading equipment and continuously investing in its own facilities. And in terms of market segments, RYCO-JA's energies will remain firmly honed on its core markets, with a particular emphasis on shipgenerated waste recovery – a service for which it is experiencing strong demand at present.

"With the current economics of the world, we'll stay focused on what we do best," avows RYCO-JA's Operations Director, as our conversation draws to a close. "As the maritime sector continues to implement strategic goals for the elimination of greenhouse gas emissions, we will evolve in tandem with the industry's needs to allow for a cleaner marine environment."

While the operations have – beyond doubt – expanded and diversified considerably from the Tofte family's initial business activities back in 1930s Long Island, the resourcefulness of one Norwegian immigrant over eight decades ago clearly lives on in the ethos of RYCO-Jamaica Ltd today.

