

FARRAG PACKAGING Limited

New Eco-Friendly Innovations

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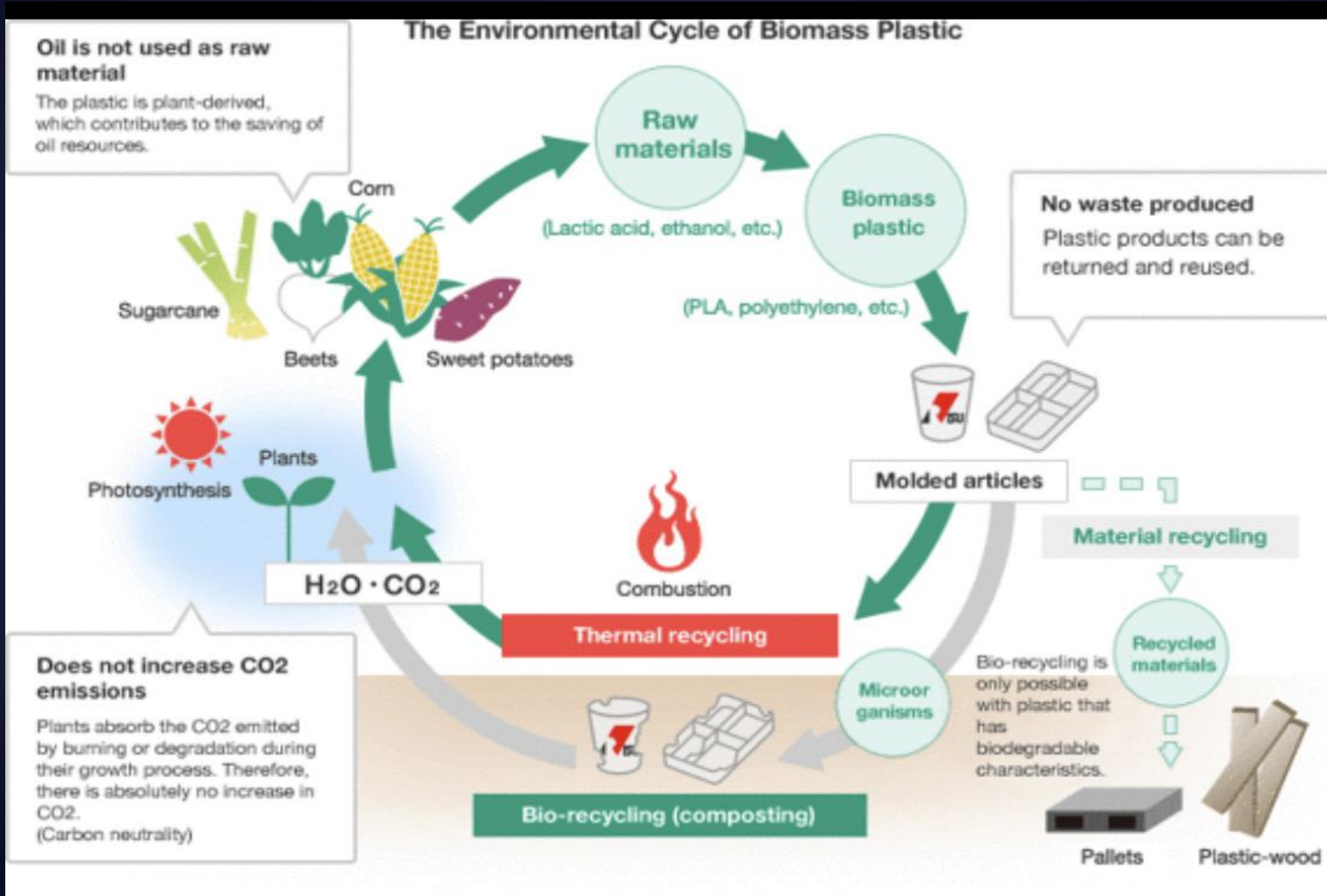
Biomass Can Technology



Biomass+ Can Technology

- Biomass is an agricultural crop (starch) based product that is 100% natural and decomposable.
- Our group has developed a special (patented applied for) injection and blow moulding process to form the Biomass Can and other products.
- Design of shapes of cans have been developed using FMEA failure mode effect analysis.
- Both the process for the moulding and can designs have been registered.
- The product 100 ml product weigh **26g**, and tested to have the capability to withstand pressure up to 20 bar.
- Presently tests are being conducted under Federation of European Aerosols (FEA) standards however there is no test for biomass it is not a plastic material.

Biomass Can Technology



Biomass Can Product Range

- Current aluminium and tinplate aerosol cans only allow products with pH of 6 to 8 to be filled, hence BOV is required to accommodate such products in can.
- Biomass Can allows pH level of **1 to 14**. Thus the whole pH spectrum can be filled, including extreme acid and alkaline base. e.g. depilatory products, and aluminium wheel cleaner.
- Also accommodates cosmetics and pharmaceutical products that cannot be filled in current aerosol cans. e.g. foundation cosmetics; pharmaceutical plastic skin etc., and inhalers at high pressure.
- Product compatibility test must be conducted by filler. e.g. Paint with DME solvent, and butane have been conducted and found compatible.
- Compatible with both usage of butane and compressed gas as propellant.

Biomass Can Technology



Biomass Can & Pure Air Valve Technologies



PURE AIR VALVE

We have exclusive access to this patented aerosol valve that allows the use of compressed air and environmentally friendly gases (e.g. nitrogen) as propellant in aerosol cans, thus eliminating the environmentally harmful and dangerous hydrocarbon gases.

- Works on Restrictive Flow principle. Current valve work on equilibrium.
- The redesigned valve also is made from compostable material and will be developed over the next two years.
- This will render the whole pack become compostable.
- Water based material, kelp and starch-based materials are also available.

Eco-Friendly Bag on Valve

Farrag Packaging is further enhancing its eco-friendly credential in the development of new material for the bag, consisting of infused biodegradable nylon, to pair up with the new biomass based valve. Thus producing an absolutely eco-friendly Bag on Valve.