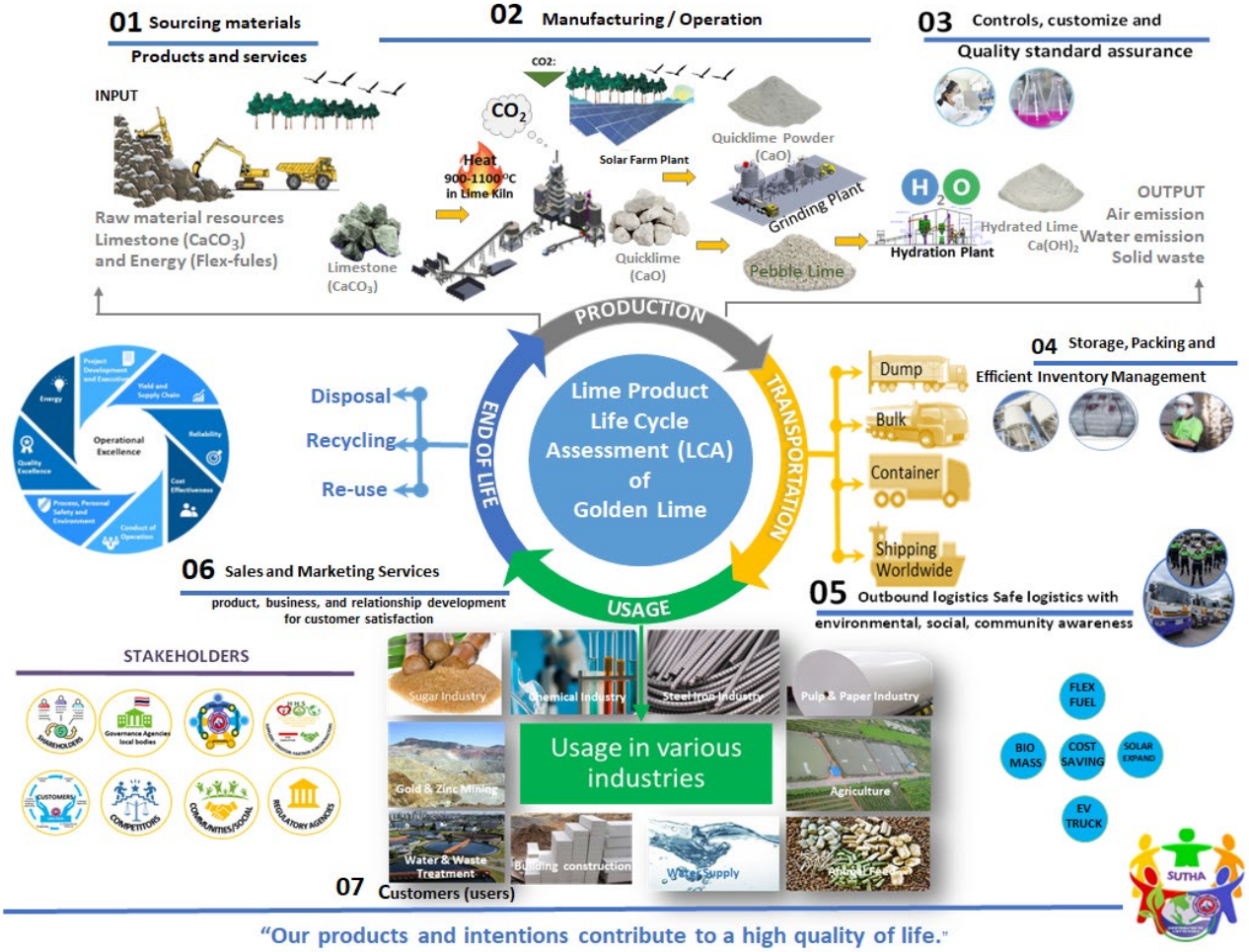
Product responsibility



SUTHA pays attention to the approach to sustainability, including the product supply chain management process, to analyze the impact and reduce the environmental impact caused by the process to a minimum by considering the life cycle of the product which is the main product of the Company, including Lime, cement and hydrated lime products by studying the information to cover the cycle of lime products under the production process of the main products, ranging from the management of raw materials that are factors of import, transportation, and production until the end of life and assess the cycle of raw materials such as the limestone cycle to study the impact that may affect the environment to cover all operation managements in an eco-friendly way.

Product responsibility management

In order to manage the environmental impacts of different products and materials and at different stages in their production, use and disposal. It acknowledges that those involved in producing, selling, using and disposing of products have a shared responsibility to ensure that those products or materials are managed

in a way that reduces their impact, throughout their lifecycle, on the environment and on human health and safety. Every product that meets safety and quality standards reduces the risk of negative health consequences, as well as any unnecessary ecological impact and waste of resources through poor quality.

Management with guidelines below

1. Product development incorporates environmental and/or social sustainability requirements in order for new products are consistent with the sustainability development framework, such as
   - Reduce the use of non-renewable natural resources
   - Reduce the use of hazardous chemicals
   - Reduce the use of energy or resources in using the product.
   - Extend the service life
   - Transformation of waste or parts of end-of-life products into inputs
   - Decomposition in nature
2. Enhancing the circular economy as a contribution to achieving sustainable consumption and production

SUTHA managing unused materials in converting unused land into functional areas.

Starting with a grouping of unused materials to manage them properly, stringent transportation and storage regulations compliance, no outbound logistics without legal permission for legally controlled materials according to the law, nonhazardous and unused materials with the characteristics as a landfill material, will be used in line with warehouse management as landfills for piling limestone, raw materials storage areas.

Product responsibility by means of resources optimization

Reusable resources and materials are managed properly in recycling and conversion as a solution to overproduction and natural resource depletion.

- Wastewater from the process to sedimentation with no effluent discharge to be reused in washing limestone, or mitigating dust in all areas and raw material piles.
- Choosing fire-resistant or refractory brick materials that can be dismantled and reused when replacing walls, ensuring that materials in good condition are selected for repairs
- Keep all reusable items well maintained such as pallets, choosing packaging materials that are designed to be used multiple times
- Machines and equipment maintenance
- Waste separation for positive society-wide benefits in achieving sustainable waste management and circular economy

The development of unused materials

Apart from landfilling our areas, the Company also develops in converting unused materials to agricultural limestone that contains natural nutrients to promote healthy plant growth in agriculture and farming for various purposes.

The lime manufacturing process already offers calcium which is a key nutrient that helps protect crops against many diseases for cooperation with agriculture sector to develop organic fertilizers formula with a mixture of chicken manure, chicken blood, soil, etc. to offer the best agricultural advantages.

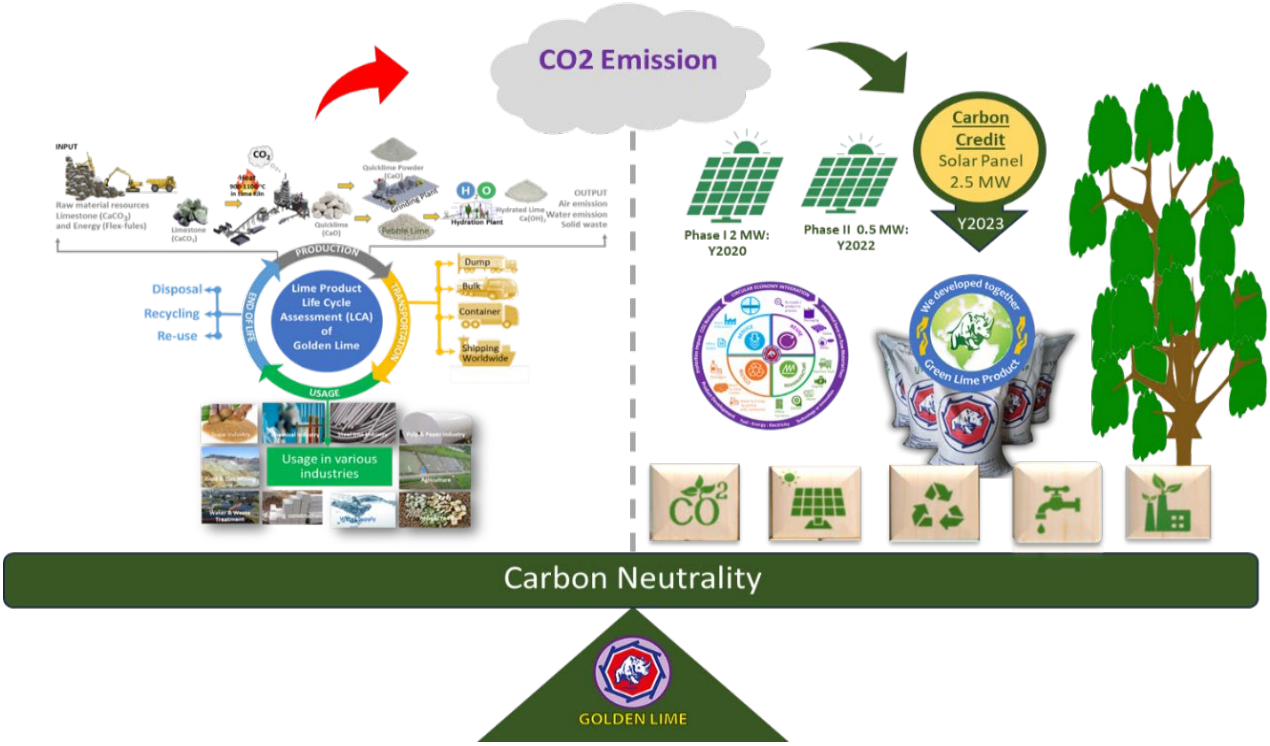
Product application for social and environmental responsibility

Lime is the versatile mineral. Various forms of lime are used in environmental, metallurgical, construction, chemical/industrial applications, sugar, pulp and paper manufacturing, fuel gas desulfurization, water and wastewater treatment, construction, agriculture, glass, energy exploration, and recreational appliances. Production is under control for precise produce quality, waste disposal to ensure long-term business relationships with customers that many of them apply lime in environmental applications, where lime is used to comply with air, drinking water, wastewater, soil stabilization, and solid waste regulations.

- AIR- pollution treatment, flue gas treatment from boilers, steam generators, process furnaces, and incinerators.
- WATER – wastewater purification of disposal from industrial process
- SOIL- Stabilization treatment of contaminated soils from agricultural activities

Lime products play a crucial role in extracting non-ferrous metals, including aluminum, copper, and gold. Lime and calcium carbonate products, in the agricultural application and Agrofood industry, is widely used as soil stabilizers and as an additive in animal feed and human food. Lime also eliminates the mineral and organic impurities in the production of sugar. In addition to such benefits, commercially, lime and calcium carbonate are used supportively as raw materials for various industries, hence considered to enhance economic growth, business growth, and continuous community services.

Product responsibility in mitigating environmental impact



Sustainability is a core value and objective, so far, we made progress via solar, and developed biomass solution technically implementation ready

Fuel available and Sustainability
- **Petroleum Coke**
- **Bituminous Coal**
- **Biomass** focus on local availability
  - Rice husk
  - Wood dust

Biomass Engineering ready but there is no CO2 incentive yet present to contribute to the capex payback yet in Thailand

Electricity sustainable

In Thailand electricity come from
- 60% from natural gas power plant
- 20% from hydropower plant
- 15% from coal
- 5% from other

We are in the 5% !!!

Solar

Golden lime has 2.5MW Solar farm
- 70m THB
- BOI support

Another 1.5MW ongoing capex