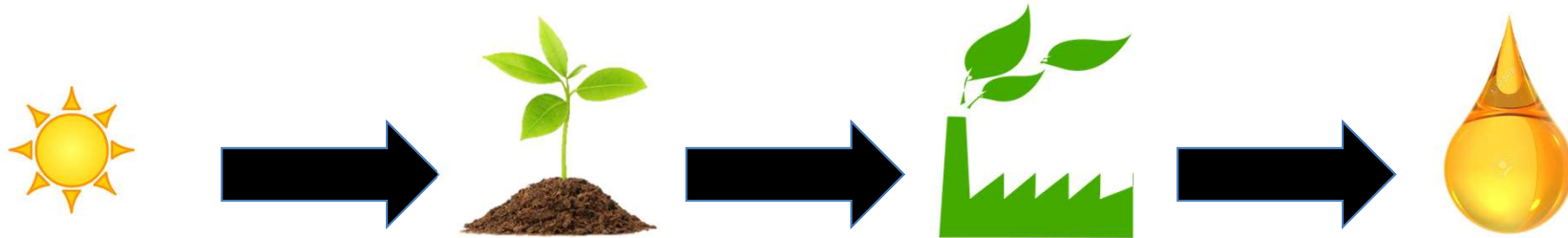


# Produksi Bioethanol di Indonesia

## How It Works



- Solar energy processed by plants
- Plant processed in the plant to be bioethanol
- BioEthanol in liquid form is easy to use
- Mixed with gasoline by distributor (Pertamina)
- Octane rise up and machine more efficient

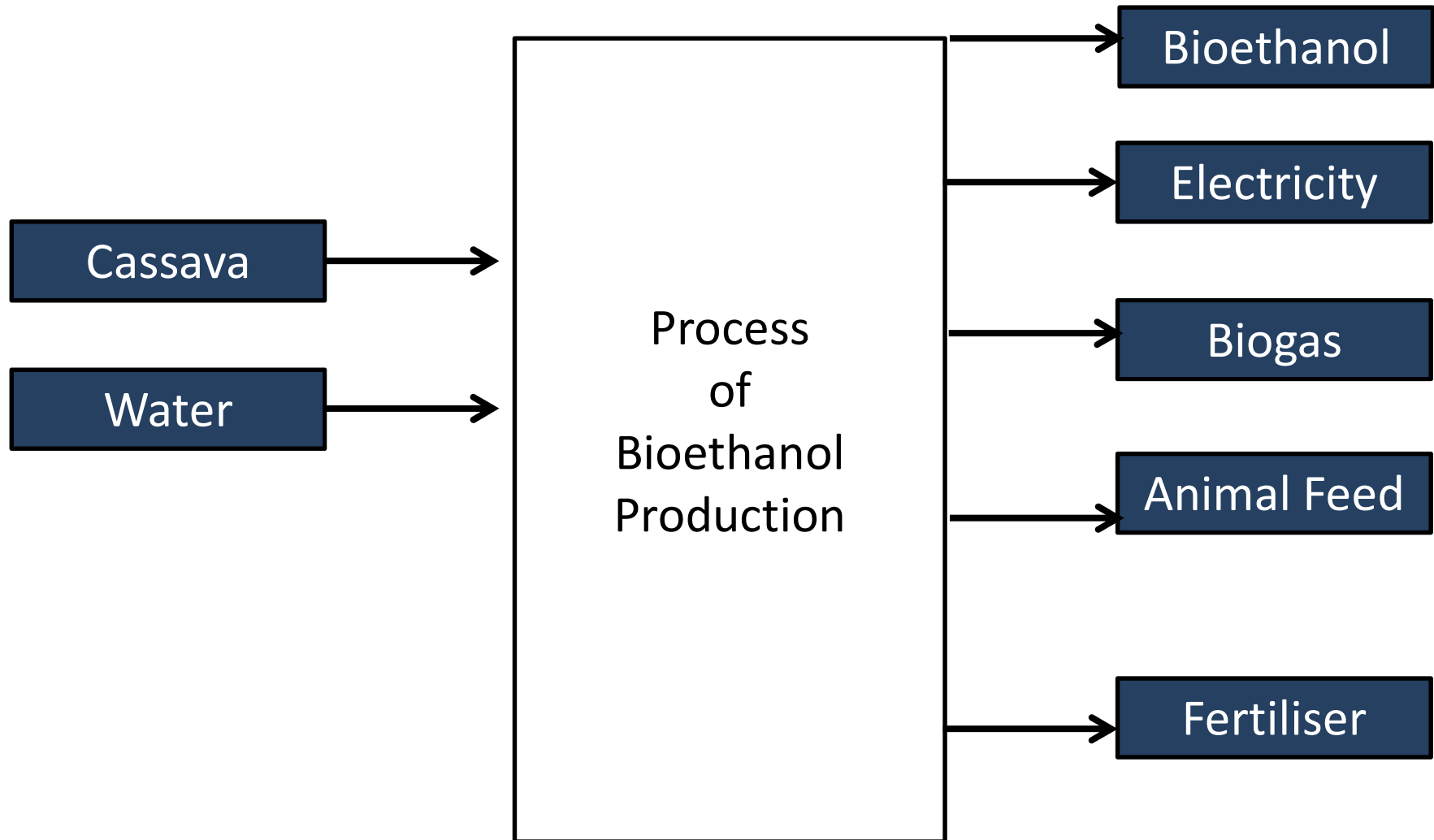
- Indonesia has a lot of land that have not been used



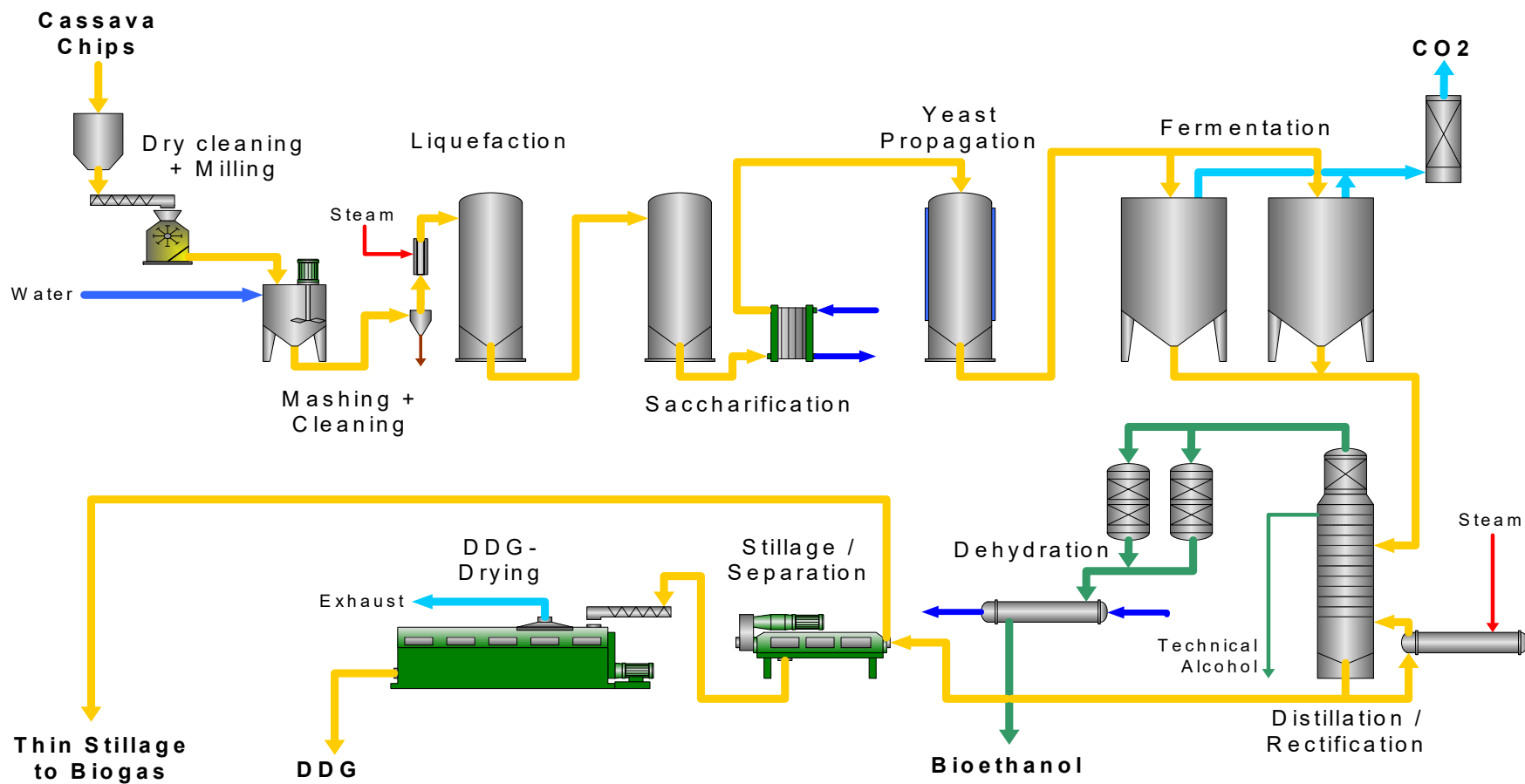
# Indonesia Cassava



# Technology



# Core Plant Process Layout



# Mechanization



Mechanization in the field very important



## Environmental aspects

- The Operation is built according to International environmental standards
- The location fulfills all international sustainability criteria
- The cassava type used is for industrial production and not suitable for human consumption. No competition w food supply.
- The Factory shall be completely integrated and making use of all waste materials. The operation will not need any energy from outside
- Efficient Transportation logistics to keep secondary pollution low.
- High value Bioethanol
- Various projects will improve the life and welfare of the local population
- CO2 savings of 560.000 to/year



# Social Aspect

- Project can encourage the local economy *rong ekonomi local*
- workers → 25000 Family members

+ Secondary Industries

- Cattle farming
- Workshop
- Trading

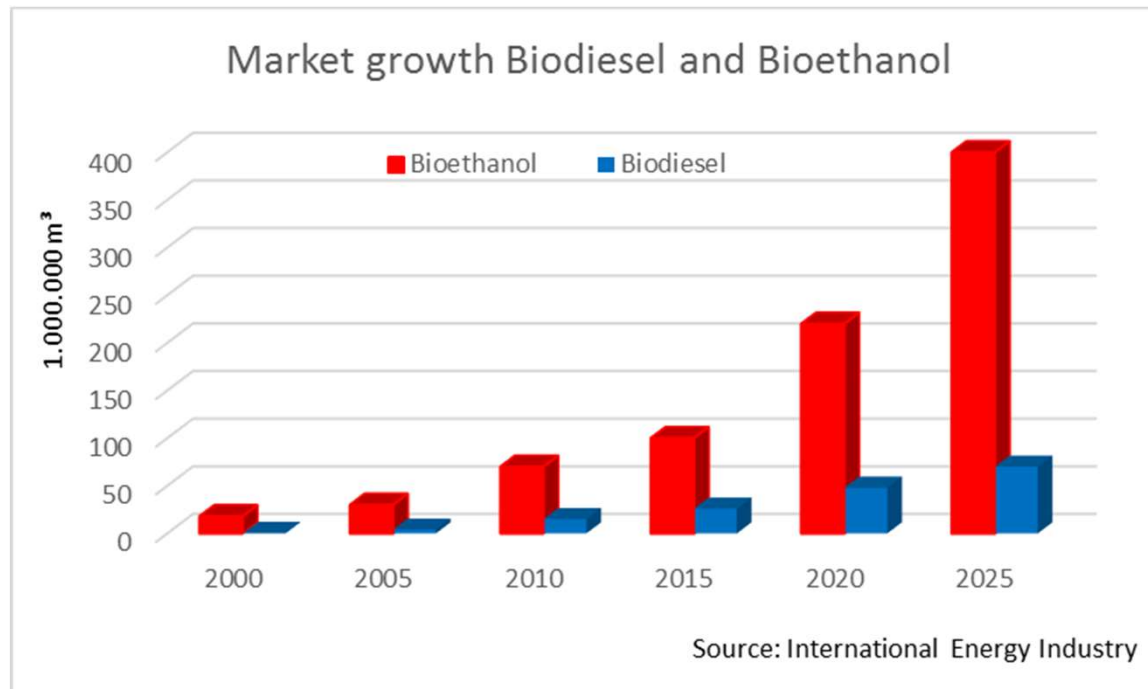
+ Tertier Industries

- Hotel
- Restaurant
- Supermarket

**→ People's Welfare**

## International Market

- More than 100 countries already using Bioethanol Mixer
- The needs until 2025 will rise 400%



- Indonesia do not have Bioethanol FuelMixer production
- According to National Energy Policy on Renewable Energy, FuelMixer needed until 2025 are 3,3jt m<sup>3</sup> = E10